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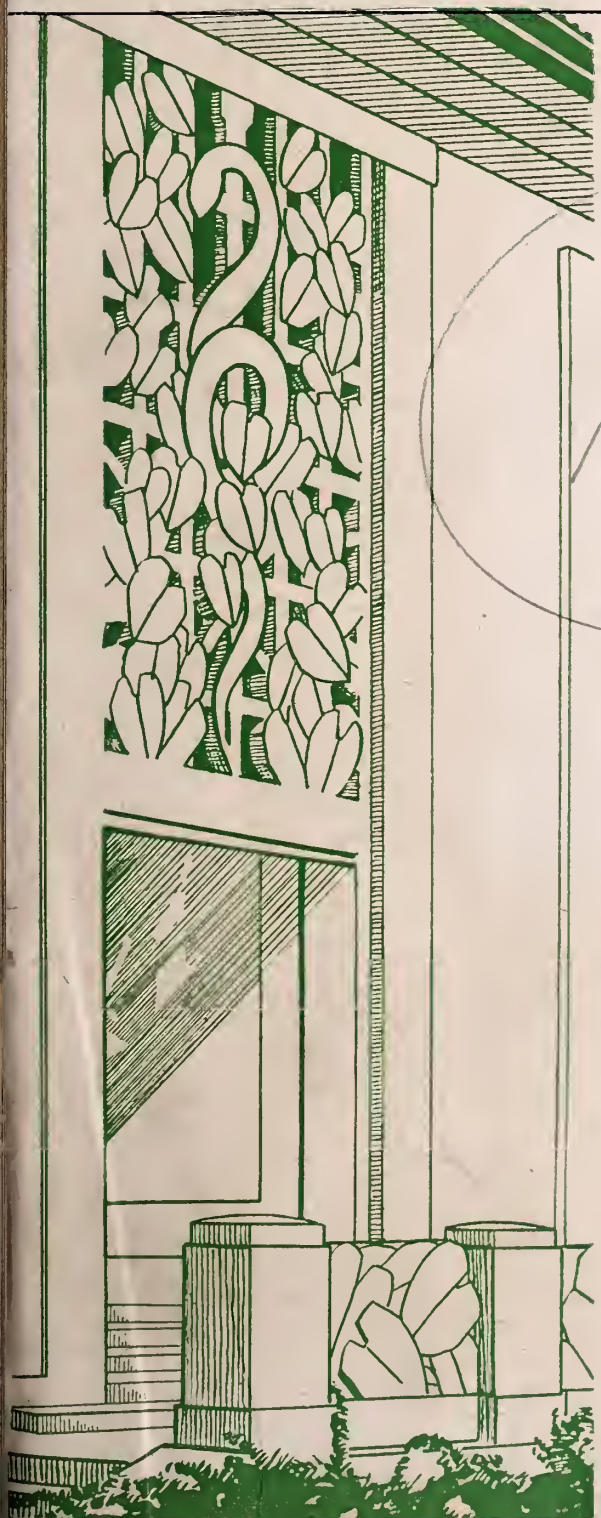
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PROMIN AND OTHER SULFONES IN LEPROSY
NORMAN R. SLOAN, M.D.

•

RHINOSCLEROMA
H. E. CRAWFORD, M.D., and M. GERUNDO, M.D.

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POSTGRADUATE LECTURES: III AND IV
CYRUS C. STURGIS, M.D.

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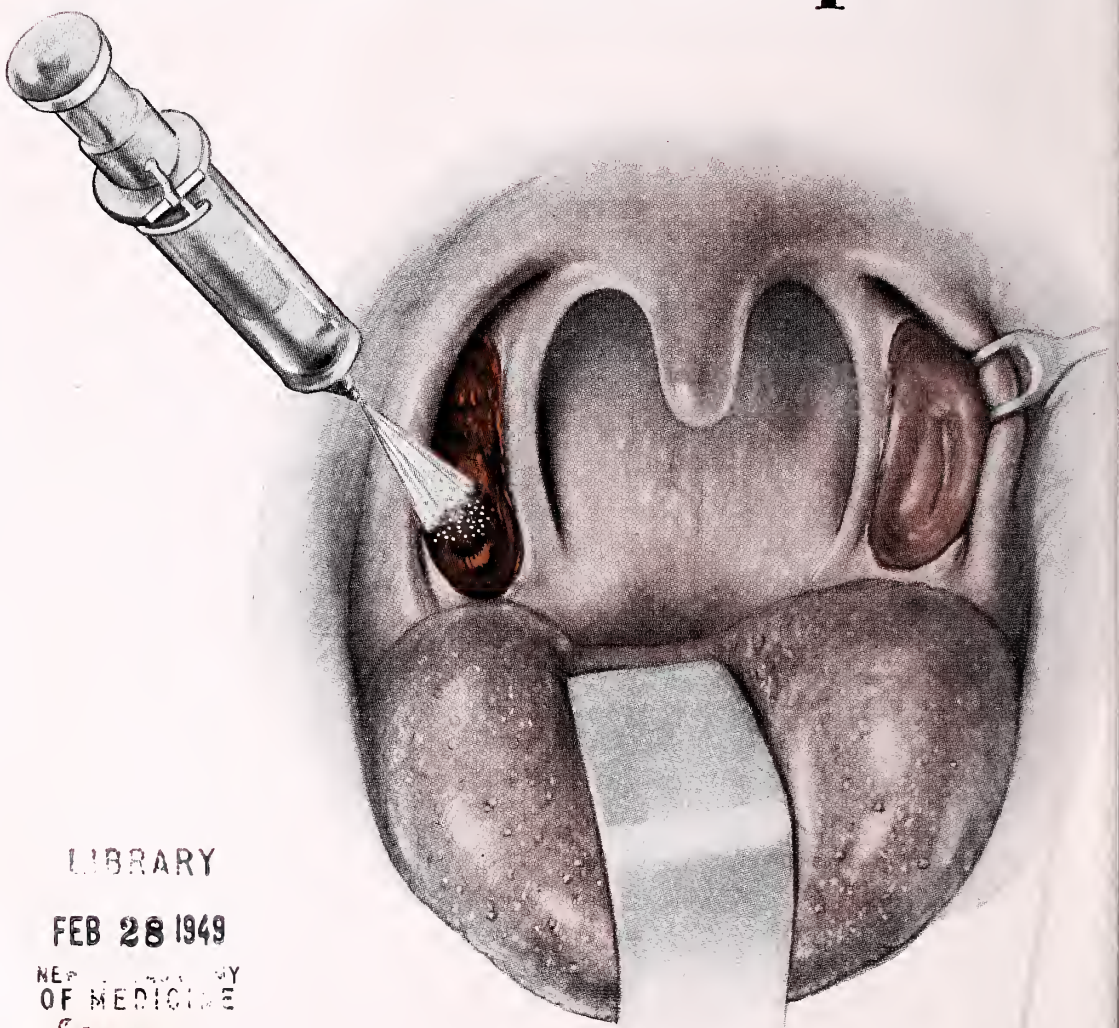
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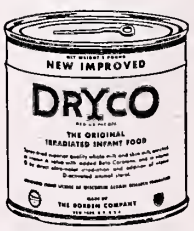
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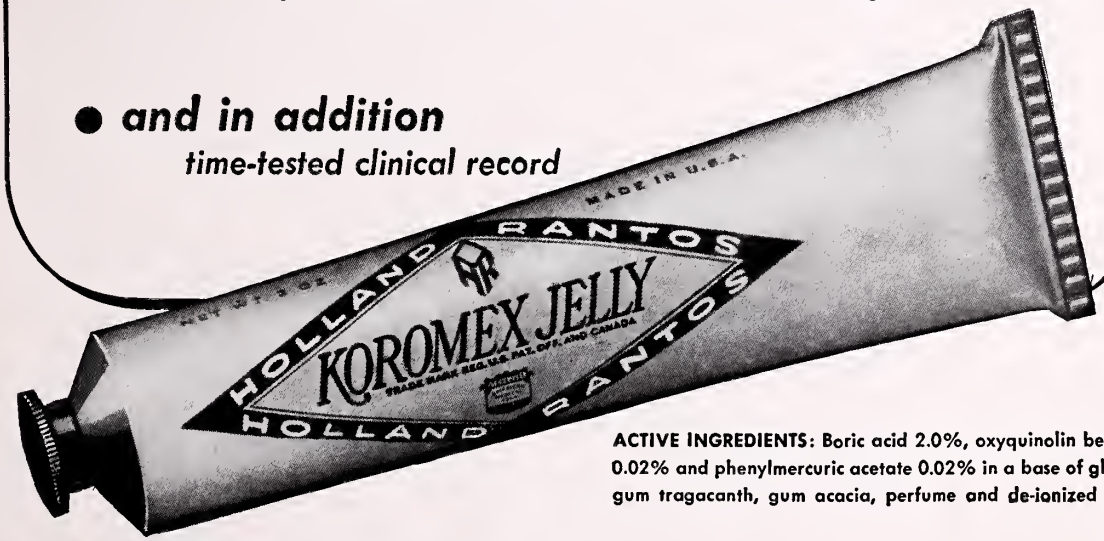
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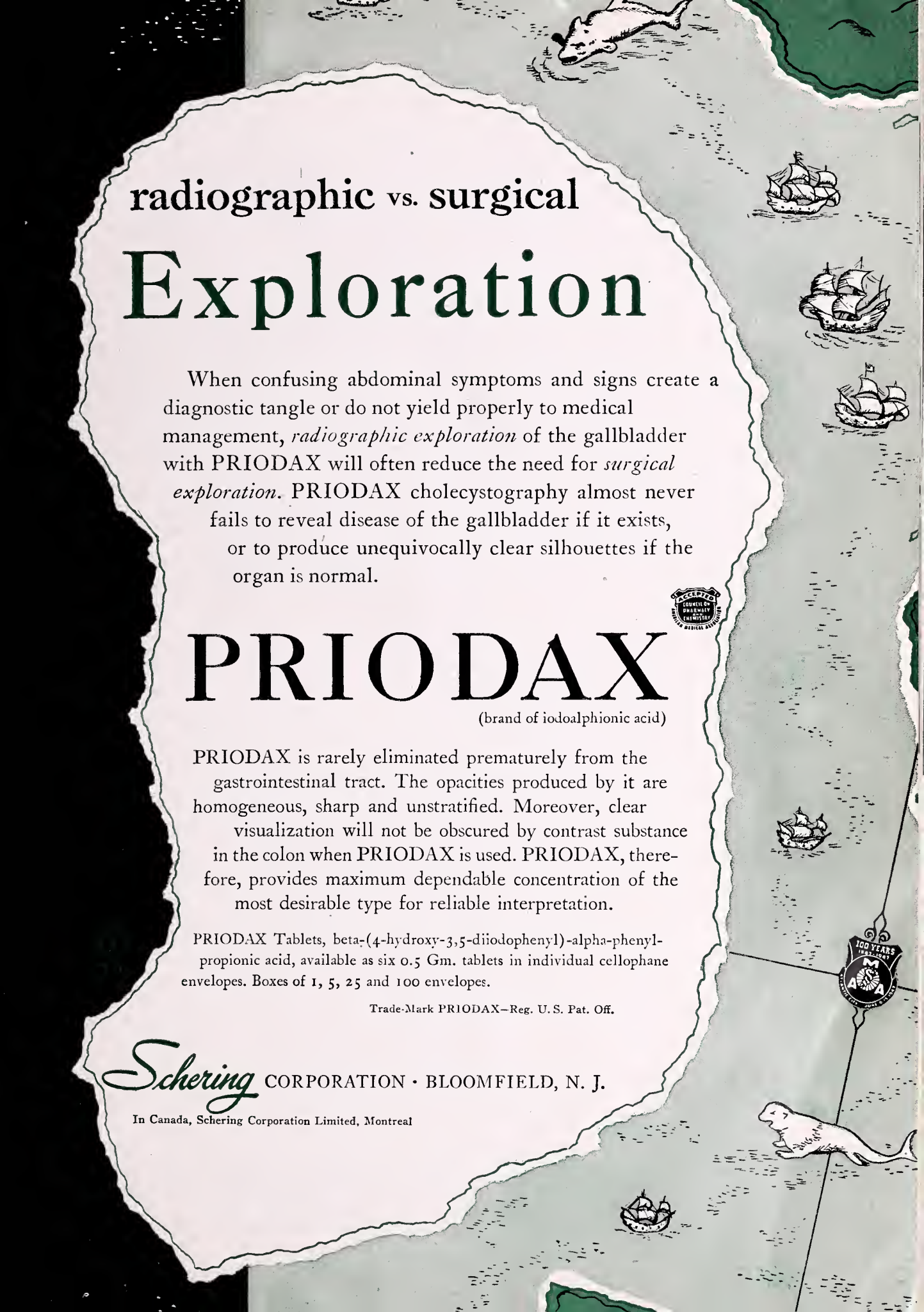
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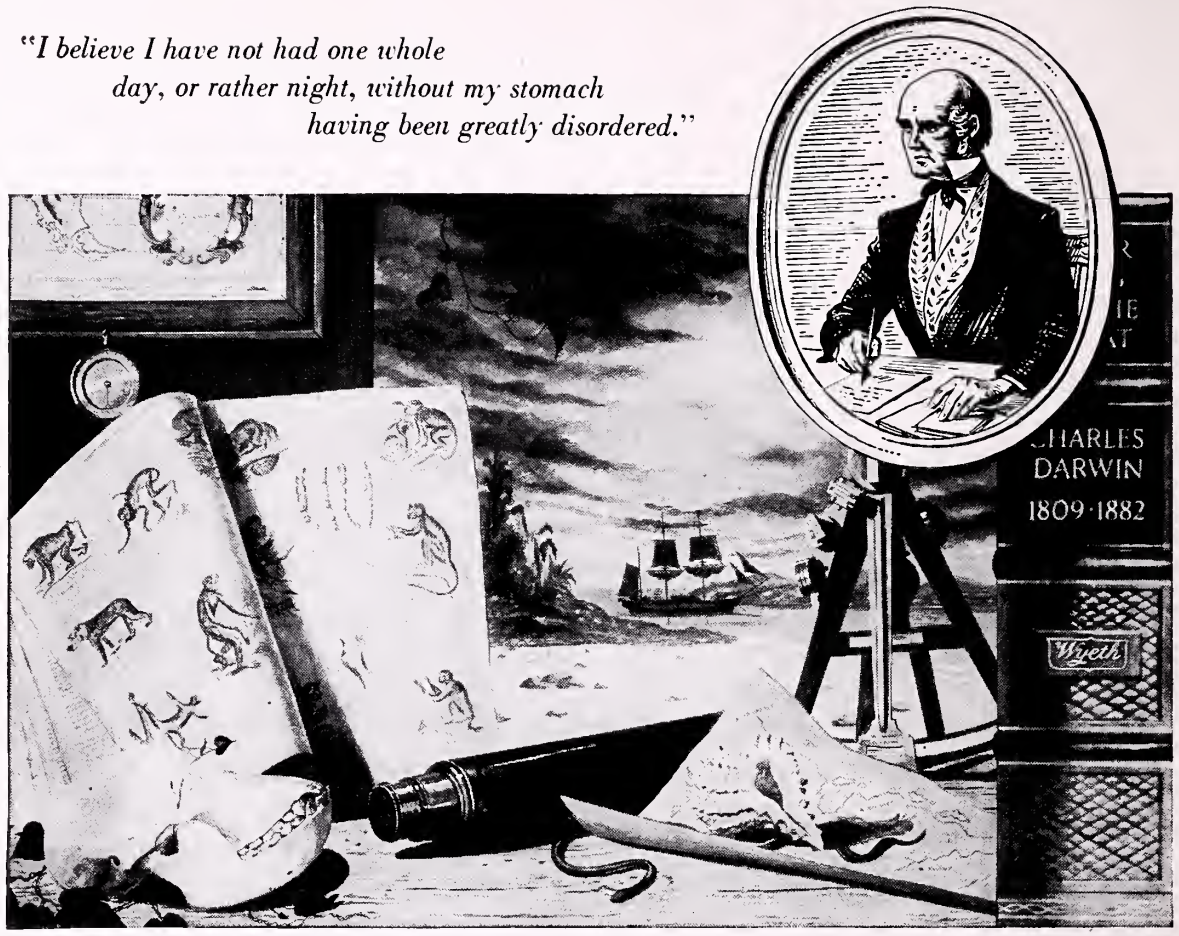
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[1]*Rehfuss, M. E., The Ulcer Life, Clinics 3:480-493 (Oct.) 1944*

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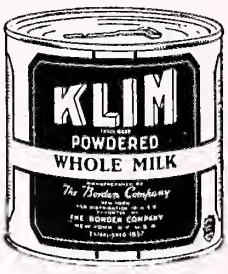
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Promin and Other Sulfones in Leprosy

Preliminary Report

NORMAN R. SLOAN, M.D.*
KALAUPAPA, MOLOKAI

THE year 1943 marked a turning point in the treatment of leprosy. Until then nothing was known which exerted a definite therapeutic effect. The much vaunted chaulmoogra oil, with its numerous derivatives, had long been discarded as useless in Hawaii, as elsewhere. Other ideas had had their brief day and passed on; one of the most recent (1941) and most publicized was diphtheria toxoid, with an associated theory of increased susceptibility caused by use of taro and related roots. It is true that with better care of complications, including secondary infections, patients at Kalaupapa Settlement were living longer. Their improved condition was partly due to two important factors: tracheotomies, when needed, were being performed sooner and receiving better aftercare[1]; and many ulcerations were healing better, in part because of local use of sulfonamides. Meanwhile, the total number of leprous patients in the territory had been steadily decreasing; this we believe is mainly the result of segregation of cases believed infectious, coupled with earlier diagnosis.

Promin

Then came the report of Faget and 5 colleagues[2] at the National Leprosarium, Carville, Louisiana. They stated that in 22 patients who had received promin, a sulfone drug, for a year or longer, 15 were improved, 6 stationary, and 1 worse. Some of their conservative yet justified conclusions were:

"Promin is the sulfonamide [*sic*] drug which thus far seems to possess to the greatest extent some chemotherapeutic properties against leprosy."

"It is not claimed that promin is a specific for leprosy, but in the writers' estimation it is an advance in the right direction in the therapy of this disease."

"Promin can be considered to have opened a new avenue in the chemotherapy of the mycobacterial diseases. It is hoped that further synthesis of sulfa compounds may produce a substance which will succeed in saving countless lives in this still dark field of medicine."

Later experience at Carville[3] has confirmed and added to this early report. But promin has two disadvantages. It is definitely toxic, producing at times hemolytic anemia; severe itching, sometimes with allergic dermatitis; nausea and vomiting; headache; dizziness; and exacerbation of leprous lesions, especially of the eyes. The second disadvantage is that the drug must be given intravenously, because toxicity is much greater when the oral route is used.

Other Sulfones

Naturally, a search soon began for something better; in particular, for drugs which would be safe and effective when taken by mouth. Several have been tried; these are all sulfones, chemically related to promin. Two have been given fairly extensive trial; these are diasone[4] and promizole[5]. Diasone has been reported to cause hematuria, which can usually be avoided by beginning with a low dose and increasing gradually; it can also produce the same toxic symptoms as promin. In some cases it causes nausea and vomiting soon after administration; the manufacturers have not seen fit to provide the tablets with enteric coatings.

Promizole, from reports thus far available, appears to be about as effective as promin or diasone, and may be less toxic; but it is not available to us, and the manufacturers report that production is difficult and expensive, so that it may not be on the market for a long time.

A fourth sulfone, pyricidin, has had a more

* Medical Director, Kalaupapa Settlement.

With the professional and technical assistance of L. A. Box, M.D., H. R. G. von Scorebrand, M.D., G. K. Fredericks, and F. W. Southard.

Read before the Fifty-Seventh Annual Meeting of the Hawaii Territorial Medical Association, May 2, 1947.

Approved for publication by the Board of Hospitals and Settlement, Territory of Hawaii.

[1] Sloan, N. R.: Tracheotomy in Leprosy, Internat. J. Lep. 12:11, 1944.

[2] Faget, G. H., et al.: The Promin Treatment of Leprosy: A Progress Report, Pub. Health Rep. 58:1729, (Nov. 26) 1943.

[3] Faget, G. H., and Pogge, R. C.: The Therapeutic Effect of Promin in Leprosy, Pub. Health Rep. 60:1165, (Oct. 5) 1945. Fite, G. L., and Gemar, F.: Regressive Changes in Leprosy under Promin Therapy, South. M. J. 39:277, (April) 1946. Faget, G. H., et al.: Present Status of Promin Therapy in Leprosy, Internat. J. Lep. 14:31, 1946.

[4] Muir, E.: Diasone in the Treatment of Leprosy, Internat. J. Lep. 12:1, 1944. Faget, G. H., and Pogge, R. C.: Treatment of Leprosy with Diasone: A Preliminary Report, New Orleans M. & S. J. 98: 145, (Oct.) 1945. Faget, G. H., Pogge, R. C., and Johansen, F. A.: Present Status of Diasone in the Treatment of Leprosy, Pub. Health Rep. 61:960, (June 28) 1946. Fernandez, J. M. M., and Carboni, E. A.: The Action of Diasone in the Treatment of Leprosy, Internat. J. Lep. 14:19, 1946.

[5] Faget, G. H., Pogge, R. C., and Johansen, F. A.: Promizole Treatment of Leprosy, Pub. Health Rep. 61:957, (June 28) 1946.

limited trial. I have seen no published reports of its use.

Trial at Kalaupapa Settlement

When the first reports of success with promin came from Carville (in part through the patients' publication, *The Star*), our patients were naturally eager to try it. But the warnings of toxicity made us hesitate, for we felt that preliminary work on such a drug should be done by an institution with adequate clinical and laboratory staff and equipment—a situation which has never existed at Kalaupapa. Then came diasone, which would at least eliminate intravenous injections; and by February, 1946, the Board of Hospitals and Settlement authorized a test of this drug. But we could not get it! Requests for experimental supply were refused, and it was not yet on the market.

A similar situation applied to promin; but it was at last placed on sale. We at once began work on 6 patients, chosen because of failing vision, in hopes that blindness would be prevented even if vision did not improve. This was in May, 1946, and more cases were soon added until 123 patients had begun treatment, including 3 who had started at Kalihi Hospital, the receiving station for leprosy on the Island of Oahu.

Personally, I have never been satisfied with the idea of intravenous therapy in leprosy, and probably we would not have started promin had diasone been available; but to achieve an evaluation as nearly scientific as our limited facilities would permit, we have asked all patients starting on any sulfone drug to agree to continue its use for a year, unless hindered by adequate reasons. Thus we hope to obtain comparable results with several drugs.

From Dr. George L. Fite, of the United States Public Health Service, who was formerly stationed at Kalihi Hospital and is now at Carville, we learned of another drug which had given good results in rat leprosy and in a few human beings. A quantity of pyricidin was obtained† sufficient for 8 patients, aged 10 to 16, whose youth or poor veins made promin inadvisable.

Meanwhile, also at the suggestion of Dr. Fite, a group of 5 patients tried quinacrine hydrochloride (Atabrin) in doses ranging from 0.05 gram to 0.2 grams daily except Sunday. No appreciable result was seen after periods ranging from two and one-half to six months, and all these patients, plus 8 who had started quinacrine at Kalihi Hospital, have since been transferred to promin or diasone.

† Through the courtesy of Dr. W. Harry Feinstone of the Pyridium Corporation.

Results

Promin

Leprosy is a disease of extremely chronic development, and one would expect therapeutic results to be slow in appearing. When, therefore, a drug is found in which an appreciable part of those receiving it show definite improvement in six months or less, it is well worth notice. In all, 123 of our patients have begun treatment with promin. Of these, 17 have stopped for the following reasons:

Died	4
Transferred to diasone	11
Temporarily discontinued	2

None of those who died had been receiving promin for more than 6 weeks. All were started as a last resort, in the early days of our promin experience. One died of advanced leprosy and 3 of tuberculous peritonitis (which among our patients has 100 per cent mortality).

The transfers were made because of poor veins, except for 1 who showed promin sensitivity, evidenced by repeated attacks of iridocyclitis and conjunctivitis, but who has been doing well so far on diasone.

Of the remaining 106 patients, 72 have been receiving promin for 6 months or more. Most of these have shown improvement, subjective, objective, or both. While a detailed clinical check on the entire group has not been possible in time for this meeting, the general trend is unmistakable. On a conservative count, it may be said that 55 are definitely improved, 8 stationary or doubtful, and 9 worse. This last group is composed principally of patients suffering from intercurrent lepra reactions.

Improvement takes many forms. Reactions are less frequent and less severe. Appetites improve and patients gain weight. Nodules flatten and small ones disappear; long standing ulcers heal; eye, nose, and throat conditions improve. Striking changes are sometimes seen in mucosal lesions; of 16 in this group who had been wearing tracheal tubes, because of laryngeal infiltration, 3 have been able to remove them, and several more will probably do so soon.

Almost as important as physical improvement is the psychologic reaction of leprous patients to a new treatment. Many had been previously disappointed by such "remedies" as chaulmoogra oil and diphtheria toxoid, and were justly skeptical of something new. When they started use of promin, the patients were told that we promised nothing, but would do our best and let them judge the results. Accordingly, a questionnaire

compiled by my associate, Dr. Scorebrand, is of particular interest. Fifty-six replies were received, from patients who had been receiving promin for 6 months or more. Some of the responses follow:

Of the 56, 50 report feeling better; 2 are not sure, and only 2 feel worse.

Thirty-seven gained weight—some too much!

Forty-one show improved appetite. (Anorexia is a common symptom in leprosy.)

Of 41 in whom lepromatous nodules were present, shrinkage or disappearance occurred in 25.

Of 43 who had cutaneous ulcers, 40 reported that healing had been better than before. In some cases ulcerations of several years' duration healed completely.

Forty-seven stated that the nose was improved, and 45 were breathing better.

Twenty-three reported improved vision, and in none is the vision worse, although temporary flare-ups of leprous iridocyclitis may occur.

Twenty stated that lepra reactions were fewer; 5 that they were more frequent.

But the prize question was, "Are you sorry you started this treatment?" Fifty-five said "No"; one was uncertain.

In this brief preliminary report I have not distinguished the two forms of leprosy, lepromatous and "neural" (tuberculoid).[6] Both show improvement, but perhaps unequally. The relatively small number of tuberculoid cases under treatment, and their known tendency to spontaneous improvement, make comparison of results in the two forms premature; but the matter will be discussed in later and more detailed publications.

Diasone

One hundred and nine patients are now receiving diasone, but the longest period is only nine weeks, so it is too soon to look for results.

Pyricidin

Eight young patients were started on this drug (in addition to one acutely ill patient who received it for only a few weeks before her death). One developed a severe hematuria after seven weeks, and the drug was discontinued. Careful urologic study has failed to show any organic cause for the bleeding, and we feel compelled to attribute it to the drug. Yet in spite of the small amount received (68 grams in all) he now shows definite regression of facial lepromas. This seems to indicate hypersensitivity to both therapeutic and toxic effects of pyricidin.

Another member of this group, while showing slight or doubtful improvement in his external lesions, developed increasingly alarming laryngeal involvement. In an effort to avoid tracheotomy (he is our youngest patient, only 11 years old) it was decided to discontinue pyricidin and to start cautious use of diasone.

Of the remaining six, two show slight or doubtful improvement. None is worse. We have decided to continue trial of pyricidin for a few more months.

Conclusion

For the first time in the long, long history of leprosy, drugs which possess a real degree of therapeutic effectiveness are available. This statement is based partly on studies elsewhere, especially by workers of the United States Public Health Service at Carville, Louisiana; and partly on results already in evidence after a trial of 11 months at Kalaupapa Settlement.

This report may be considered premature; but we feel that the striking progress already evident, especially as regards healing of long standing cutaneous ulcers, arrest of failing vision, and improvement of laryngeal conditions, fully justifies a preliminary statement to the physicians of Hawaii at this time. As yet, we do not speak of a "cure"; we hardly dare to hope for it; yet the agreement of our results with those reported elsewhere leads us to feel that there is room for real optimism regarding eventual solution of the ages-old problem of leprosy.

Since this is so, it is now more than ever important that the medical profession of Hawaii continue the good work, already well begun, of diagnosing cases of leprosy in the early stages, when there may be reasonable hope of arrest within a few years, with prevention of blindness and crippling deformity.

Summary

Three sulfone drugs—promin, diasone, and pyricidin—are being used at Kalaupapa. Promin has been in use for 11 months, and is showing encouraging results. Improvement with pyricidin is less definite. Diasone has not as yet been in use here long enough to judge its value.

Highly encouraging reports on the use of promin and diasone have been made by workers in other parts of the world. It seems safe to say that for the first time drugs of real value for the amelioration of leprosy are at hand. Perhaps in time—but not yet—we may even speak of cure.

[6] Tilden, I. L., and Arnold, H. L., Jr.: The Two Kinds of Leprosy: Lepromatous and Tuberculoid, Proc. Staff Meet. Clin., Honolulu 10:91, (Sept.) 1944. Arnold, H. L., Jr., and Tilden, I. L.: The Classification and Nomenclature of Leprosy, with Suggestions for the Simplification of Both, Ann. Int. Med. 23:65, (July) 1945. Arnold, H. L., Jr.: Differentiation of Lepromatous from "Neural" Leprosy, Arch. Dermat. & Syph. 52:354, (Nov.-Dec.) 1945.

Discussion

DR. E. A. FENNEL: You have just heard a report that marks an era in the medical history of Hawaii nei. It is a very important one.

On the day I first set foot on these hospitable shores in 1919, I saw my first leper, as they were called in those days (he was the civilian employee who handled the officers' baggage at the military pier—he was a heavy leonine case), and I have been keenly interested in leprosy ever since.

Quite recently I made a three-day-trip to our Settlement at Kalaupapa. Now I believe in miracles; almost in a beneficent God.

When I first knew Kalaupapa many years ago, it was a horrid hell hole of hopelessness. There was a sweetish, sickening stench over the whole place and the buildings were even more decrepit than the patients. There was practically no medical attention besides some cathartics and many bandages and dressings, put on by amateurs—the word means "those who love"—mostly kokuas and practical nurses.

A little chaulmoogra oil was still being given but the great majority of the disillusioned and discouraged patients, having seen the results, or rather the lack of them, refused further treatments, in spite of vigorous propaganda by some of our local chemists, who were producing numerous esters of the oil. In spite of all this misery, there were many smiles on the faces of the patients of Kalaupapa. That was the end of one era.

Then the problem of leprosy was turned over to the Board of Hospitals and Settlement, and great strides were made in the physical rehabilitation of the Settlement. A modern hospital was built and trained nurses employed, but there was little change in therapeusis. There were more and better dressings for the numberless ulcers and there were more smiles in Kalaupapa. But, with here and there an exception, the rule was that the prognosis was poor indeed, though death was often long delayed. Even in and over all these new buildings there hung that pall of the sickeningly sweet stench of many, many ulcers.

So ended that era; and another was ushered in by the advent of sulfanilamide and later its chemical relatives. A great deal of topical application to ulcers was made and, while there was no effect on M. leprae, the mixed infections dwindled and were held in reasonable control. The air cleared. I shall never forget the first time, in this era, that I walked into the Hospital; I smelled good, cooking food—without an overlay of that deadly, sickening odor that used to be everywhere. There were many smiles and cheerful Alohas on all sides.

Then came promin, and later diasone, which ushered in the present era.

Dr. Sloan is conservative and not carried away by enthusiasm. He has lived with these patients day in and day out and the retrogressions, for him, were not startling.

But for me it all was more than startling—it was as inspirational as a religious episode would be to some people.

Less than a year ago, on my last visit, for example, I talked long and earnestly with my friend, Harada, who came to national attention through the writings of Ernie Pyle. He was heavily nodular at the time, and it must have taken hours to apply all the dressings to the ulcers of his hands and fingers, that he needed so much for his typewriter.

This time his face was relatively smooth and there was not a single dressing on his hands—only new, pale epithelium. To paraphrase Paré, "Sloan injected him; God healed him." It would be asking too much of God to restore to Harada the fingers that had to be amputated or to straighten out the contracted ones. But it is not asking too much of you, my fellow physicians, to discover these cases at a stage where these new drugs will restore to the community a whole man—not a fraction of a man.

Another example—a Caucasian woman, a friend of my wife—when last I saw her she was sitting in a corner, sick, trembling, protecting her eyes, that were going blind, from the light. She was heavily nodular and was having difficulty with her tracheal tube. I had difficulty understanding her speech. I left her with a very sad heart.

This time, a door opened and out onto the lanai jauntily walked a woman, obviously full of energy and self confidence; she looked at me and even before I spoke she recognized me by sight! She wore a dress open at the neck, and there was a small healed scar, where her tracheal tube used to be! Her voice was normal, and her face showed only whitened skin where lepromata used to be. We chatted awhile and then she went happily about her business. I was nearly moved to tears—tears of happiness.

This is, then, the era of hope and confidence; this is the era, not of smiles, but of loud, hearty laughter—you should have heard it at a recent ball game between the patients and the kokuas. It was a good game, but my chief interest was the audience, their laughter and most obvious happiness.

This is indeed, The Era; the most important one, for these people, since biblical days. I am grateful that I have lived in it and seen it at close range.

Rhinoscleroma

Report of First Two Cases Recognized in Hawaii

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HILO, HAWAII

RHINOSCLEROMA, or scleroma, is a chronic granulomatous infection of the upper respiratory tract. It was first described by Hebra in 1870 and later studied by Kaposi, Mikulicz, and Unna. In 1882 von Frisch discovered a bacillus now known as Klebsiella rhinoscleromatis which is generally accepted as the etiological agent.

Epidemiologic History

The disease appeared to be localized in eastern Europe, Poland, Russia, and Galicia, particularly along the Pripjet River,[1] but soon after World War I it was reported from other parts of the continent. This spread was ascribed to the return of war prisoners from the affected regions.[2] Later cases were found in North Africa, Southern Asia, Sumatra, and Central America. Cases have since been reported from Cuba, Mexico, and South America. It was believed that all cases in the United States were in immigrants from Europe or their offspring, until 1921, when Watkins[3] reported the disease in an American-born negro. Endemic areas have since been discovered in South Carolina[4] and southern California.[5] Reviews by Figi and Thompson,[6] Dill,[7] and a symposium held by the International Congress of Otorhinolaryngology[8] at Madrid in 1932 cover the subject in detail. A more recent article, which reviews foreign and American cases, is that of Cunning and Guerry.[9] According to these two authors, in the United States there have been only sixteen cases in native born up to 1942. No cases have been reported from Hawaii, the Philippines, the spread of the disease after World War I and one might expect the same to occur after World War II.

Clinical Aspects

The disease may involve the mucous membrane of the nose, nasopharynx, eustachian tube, middle ear, pharynx, soft palate, larynx, and trachea. It may extend to several regions or be localized in one. It may be primary in the larynx[10] or trachea, but this is not usual. Essentially the China, or Japan. Putschowsky[8] has pointed out lesions are either discrete, cyanotic, firm nodules of varied dimensions or diffuse submucous infiltrations with a hard consistency and lardaceous appearance in the early stage.[8] The process may begin near the nasal vestibule and from there propagate under the skin of the columella and upper lip and into the nasal cavities. The disease is of long duration and leads to sclerosis of the nodules and stenosis but does not become generalized.[8] It is divided into four stages: (1) Indurative or catarrhal stage during which there may be profuse discharge with a foul odor, resembling ozena. (2) Stage of infiltration and non-specific granulation with predominance of plasma cells and new capillary formation. (3) Stage of granuloma and of specific cells at which time the nodules or infiltrations are of cartilage-like hardness and the microscopic picture shows foamy and clear cells (Mikulicz' cells) and hyaline globular masses (Russel's bodies). (4) Stage of sclerosis when the specific cells disappear and give way to dense avascular collagenous tissue. The stage of sclerosis may be predominant in one region with newer lesions present in others. The course of the disease from the initial stage covers many years, from five to thirty-five, according to various authors. The specific organisms may be seen in the tissues during any of the active stages of the disease.

The lesions may be easily confused with tuberculosis, leprosy, syphilis, and carcinoma.[11] We be-

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[1] Haub: Das Sklerom und seine wachsende Bedeutung durch die Zuwanderung aus dem Osten, Munch med. Wchschr. 91:197 (April 21) 1944.

[2] Malan, H.: In Ceconi, Medicina Interna, Minerva Medica, Turin, Vol. II; 1937, page 313.

[3] Watkins, S.S.: Primary Scleroma of the Larynx in a Negro Born in Maryland, Surg., Gynec. & Obst. 33:47 (July) 1921.

[4] Simpson, C. A., and Ellis, F. A.: Rhinoscleroma, Arch. Dermat. & Syph. 39:503 (Mar.) 1939.

[5] Levine, M., and Hoyt, R.: J. Clin. Inv. In press.

[6] Figi, F. A., and Thompson, L.: Rhinoscleroma, J.A.M.A. 91:637 (Sept. 1) 1928.

[7] Dill, J. L.: Rhinoscleroma—Report of One Case, Ann. Otol., Rhinol., & Laryngol., 52:496 (June) 1943.

[8] Second Intern. Congr. of Otolaryngology: Report on Rhinoscleroma, Arch. Otolaryngol., 18:381, 1933.

[9] Cunning, D. S., Guerry, D. P.: Scleroma, Arch. Otolaryngol., 36:622 (Nov.) 1942.

[10] Chamberlin, W. B.: Rhinoscleroma, Arch. Otolaryngol., 23:285 (March) 1936.

[11] a. Morrison, L. F.: Scleroma, Arch. Otolaryngol., 28:531 (Oct.) 1938. b. Schwartz, A. A.: Rhinoscleroma, Arch. Otolaryngol. 21: 199 (Feb.) 1935. c. Gadomski, C. F.: Rhinoscleroma, Arch. Otolaryngol., 29:681 (April) 1939.

lieve there is a striking similarity between this disease of the respiratory mucous membrane and leprosy of the skin. Both have an incubation period lasting many years, an insidious onset, and a chronic indolent course with little effect on the general health of the patient. They are both only slightly contagious. The mode of transmission is in each instance unknown but flies, fleas, bedbugs, and lice have been suggested as vectors.[8, 12] Both are associated with poverty, ignorance, close contacts, nutritional deficiencies, and probably constitutional factors.[13] Both are nodular and may originate in the nose. The organisms of both diseases are found in the same types of cells as the Mikulicz' and lepra cells are derived from the reticulo-endothelium. In both diseases the organisms are difficult to inoculate into animals. There is one striking difference: the organisms of rhinoscleroma are easily grown in pure culture from the granulomatous lesions, whereas the bacillus of leprosy has been cultured with difficulty if at all.

The bacillus of Frisch, now incorporated in the genus Klebsiella together with Friedländer's bacillus and named Klebsiella rhinoscleromatosis, is a capsulated, non-motile gram-negative rod occurring singly and in pairs, which grows easily on tryptose agar and other ordinary media, forming mucoid, confluent, whitish colonies. Although there has been some controversy as to its exact relation to the disease[9] and Topley and Wilson[14] still regard it as a secondary invader, it is now generally accepted as the etiologic agent.[6, 15] It is present not only in the nasal cavity of the patient suffering from scleroma but also in the lesion, where it is found either engulfed in Mikulicz' cells, polymorphonuclears and plasma cells, or free in the interstitial spaces.[4, 10, 16] Cunning and Guerry[9] advanced the hypothesis that it may be in symbiosis with a virus but in their six cases they were unable to find any inclusion bodies. All the more recent reports mention the constant isolation of the bacillus from the lesions. Lasagna[15b] and Sivak[17] have reported familial scleroma and isolation of the bacillus from practically all the members of the family affected with the lesion. So far there is no certainty of transmission of the disease to animals. However, Sercer[18a] was able to reproduce lesions in animals resembling the human disease, thus confirming previous reports of successful inoculation. Rivers [18b] points out that strict adherence to Koch's postulates may hinder the study of pathogenicity and that fulfillment is neither essential nor always desirable.

The serological tests have been more successful. Positive skin reactions occur, and agglutinins and complement-fixing antibodies have been demonstrated in the blood of patients.[1, 15, 19] The usefulness of complement fixation in detecting early cases of scleroma has been emphasized by Levine and Hoyt.[20] According to Belinoff,[21] it is positive in the very early stages of the disease and it may be the first means of diagnosis.

Treatment

The methods of treatment of this disease include x-ray[11c, 22] and radium therapy,[6, 13] surgical removal of the lesions, sulfonamides,[9] autogenous vaccine,[6] and numerous other agents including arsenicals and fever therapy. None has proven consistently effective except radiation and surgical treatment. Three cases were treated with sulfanilamide and two cases with sulfadiazine by Cunning and Guerry,[9] without lasting benefit.

Surgical removal of the lesion appears to be the treatment of choice when it is so located that it can be done, since x-ray and radium tend to increase the amount of cicatrization and stenosis. This aspect of therapy has been covered by Pardo-Castello and Dominguez,[23] Burak,[8] Figi and Thompson,[6] and others. Unfortunately in most cases the lesion is so diffuse that it is impractical to remove it surgically. Radiation by x-ray or radium or both, according to Peter,[22] Weiss,[13] Cunning and Guerry,[9] and others has been consistently effective in bringing about reduction in the size of the lesions by fibrosis. Peter[22] has outlined the technique of x-ray therapy.

Case Report

CASE 1.—S. D., age 48, is a Filipino male who had lived continuously on the Island of Hawaii for about

[12] Steinhaus, E. H.: Specific Bacteria Associated with Insects, Insect Microbiology—Comstock Publishing Company, Ithaca, N.Y., 1946, page 46.

[13] Weiss, J. A.: Scleroma: Histologic Changes Following Teleradium, Arch. Otolaryngol., 30:38 (July) 1939.

[14] Topley, W. W., and Wilson, G. S.: Principles of Bacteriology and Immunity, 2nd Edition, William Wood, Baltimore, 1936, page 1416.

[15] a. Berge, Ch.: Etude bactériologique d'un bacille de Frisch isolé du premier cas de Rhinosclérome publié en Tunisie, Arch. Inst. Pasteur de Tunis, 31:197 (Dec.) 1942. b. Lasagna, D. F.: Bacteriology of Scleroma, Arch. Otolaryngol., 18:396 (Sept.) 1933.

[16] a. Kellert, E.: Rhinoscleroma: report of a case, New England J. Med., 229:647 (Oct. 21) 1943. b. Alderson, H. G.: Rhinoscleroma: report of a case, Arch. Dermat. & Syph., 36:1018 (Nov.) 1937.

[17] Sivak, M.: Das Sklerom in der Slovakei, Monatschr. f. Ohrenh., 75:55 (Feb.) 1941 and 75:183 (April) 1941.

[18] a. Sercer, A.: Experimental Pathology of Scleroma, Arch. Otolaryngol., 18:395 (Sept.) 1933. b. Rivers, T. M.: Viruses and Koch's Postulates, J. Bact., 33:1 (Sept.) 1937.

[19] Neuber, E.: Serology and Allergy of Scleroma, Arch. Otolaryngol., 18:397 (Sept.) 1933.

[20] Levine, M., & Hoyt, R.: Complement Fixation in Rhinoscleroma. To be published.

[21] Belinoff, S.: Der jetzige Stand der Skleromfrage, Zentrabl. f. Hals-Nasen ü Ohren., 26:193, 1936. Quoted by Haub.[1]

[22] Peter, G.: Treatment of Rhinoscleroma with Roentgen Rays, Radiology, 27:367, 1936.

[23] Pardo-Castello, V., & Dominguez, M. M.: Rhinoscleroma, Arch. Dermat. & Syph., 5:478, 1922.

fifteen years, and had worked for twelve years in the fireroom of a sugar mill prior to the time he was first seen in Kohala on September 30, 1943. At that time he complained of deafness and nasal obstruction. There was no pain.

Examination showed his tympanic membranes to be thickened. The nasal passages were very narrow. There was marked thickening of the septum and crusting of the mucous membrane, not suggestive of atrophic rhinitis. No odor was noted. An indurated ulcer was seen at the superior pole of each tonsil, the one on the left side extending well onto the soft palate. A biopsy from this lesion indicated chronic and subacute inflammation. No specific diagnosis was made. The Wassermann was negative. A tuberculin test was strongly positive. X-ray of the chest revealed a lesion which was interpreted as active tuberculosis of both upper lobes.

In 1944 the patient was admitted to Puumaile Hospital for Tuberculosis on the basis of the findings noted.

The patient had never had any pulmonary symptoms whatsoever and his weight had been constant throughout the present illness. There had not been any dyspnea, palpitation, or edema and his appetite was very good.

On physical examination the prominent findings were a granulomatous mass the size of a lima bean in the columella on both sides and definite partial obstruction of the nose because of a granulomatous lesion involving almost entirely the soft palate, left tonsillar fossa, pillars, posterior pharyngeal wall, and nasal passages. The sputum was repeatedly negative for tubercle bacilli. Several attempts to find the bacilli by concentration methods yielded negative results. Inoculation of sputum into a guinea pig was also negative. The pulmonary lesions were definitely arrested.

During the time he was in Puumaile Hospital there was no change in the films of the lungs. On the left side there were soft confluent densities in the extreme apex with the rest of the lung clear; on the right side there were a few soft spots and confluent density in the apex and first interspace with the remainder of the lung clear.

After seven months in the hospital, in view of the arrest of the pulmonary lesions and the repeatedly negative sputum, the patient was discharged with a diagnosis of pulmonary tuberculosis, inactive, arrested.

The report of the Eye, Ear, Nose and Throat consultant was as follows: Moderately large mass involving the columella (Fig. 1). This process involved the entire mucous membrane of the nose. The mouth showed a granulomatous mass involving the left posterolateral pharyngeal wall and the soft palate. The mucous membrane of the soft palate could be most directly observed. It was thickened and indurated, its color slightly bluish. It was slightly roughened. There was no active ulceration. However, in the nose, over the inferior turbinates and septum there was crusting and slight bleeding followed removal of these crusts. Kahn test negative. The tuberculin test was positive. Culture for fungus from the throat was negative.

A second biopsy was taken. Histologic report of this stated the specimen to be loose connective tissue heavily infiltered with lymphocytes, plasma cells, endothelial cells, and polymorphonuclears, and covered by stratified squamous epithelium of irregular thickness. Stain for tubercle bacillus or leprosy bacillus was negative. Diagnosis: Non-specific granuloma.

Since discharge from the hsopital the patient has resumed his duties on the plantation. He has become quite deaf but there are no granulations visible in the middle ear, only thickening of the tympanic membranes. The lesions in the palate, nasopharynx, and nose have healed to some extent with cicatrization and partial stricture of the nasal passages and nasopharynx. Presumably the deafness is due to disturbance of the Eustachian tubes but adequate examination was not carried out because of narrowing of the nasopharynx. The lesion in the columella has extended into the lip. Here the skin is intact but contains enlarged vessels. There are lesions about the pharynx and the arytenoids but none within the larynx. He is apparently in good health and suffers little discomfort other than nasal obstruction and deafness.

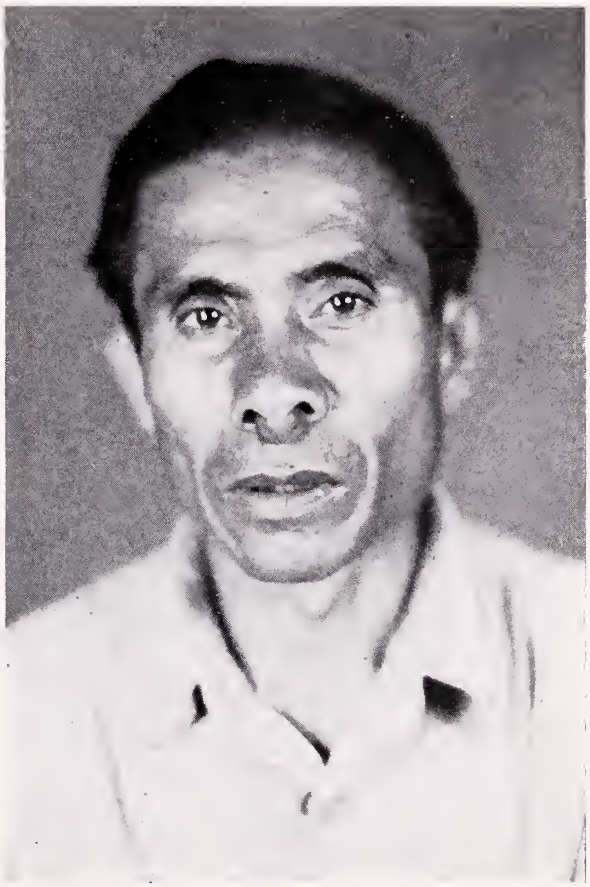


Fig. 1.—(Case 1) Characteristic bluish-red mass of rhinoscleroma in the nasal columella.

On February 12, 1947, a biopsy was taken from the lesion in the lip. The skin was incised and a specimen secured containing skin and subcutaneous tissue. The granulomatous material could be scooped out like mush. A culture was taken from it. There was moderate bleeding which subsided in a short time. The skin incision healed uneventfully.

The patient has recently been given Roentgen therapy but it is too early to indicate the results.

Pathological Laboratory Examinations

Microscopic Description of third biopsy:

The epidermis is rather thin and regular with only an occasional papillary projection into the dermis. The dermis itself shows only a moderate infiltration of round

cells, chiefly plasma cells. Deeper in the subcutaneous tissue there is a compact area, uniform in appearance under low power, except for a few strands of collagenous fibers which dissect coarsely the granulation tissue. Under high power the tissue shows many hemorrhagic areas and is made up chiefly of closely packed plasma cells mixed with which are many polymorphonuclears and cells of endothelial extraction. Here and there are seen clusters of large cells with rather dark nucleus and a clear cytoplasm (Mikulicz' cells). In some areas are seen cells containing a rather granular cytoplasm which stains faintly with eosin, and in still other areas are cells showing transitional changes between these two types. In examining the structure of the plasma cells, one may see that many of them are larger and that their cytoplasm is not uniform but tends to become granular and vacuolated. The impression is gained that the large vacuolated cells seen here and there represent the last stage of a degenerative process which involves the plasma cells. In some areas one can see small or large round globes sometimes showing a pyknotic nucleus and staining very intensely with eosin (Russel's bodies). Their presence among plasma cells, their size and their shape seem to indicate that they are plasma cells that have undergone hyaline necrosis. Bacilli, either single or in couples, are found inside many cells as well as free in the interstitial spaces; they are not by any means, limited to the large vacuolated cells (Figs. 2, 3, 4).

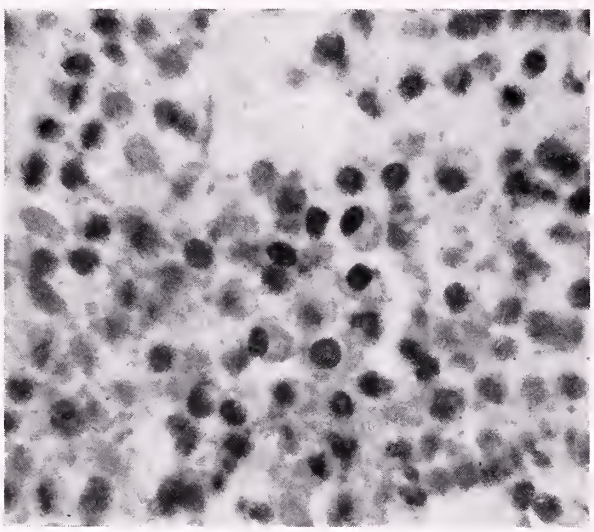


Fig. 2.—(Case 1) Photomicrograph of granulation tissue showing plasma cells.

Re-examination of the original slides shows exactly the same prevalence of plasma cells, Mikulicz' cells, and occasional Russel's hyaline globes. However, sclerosis in areas is more diffuse indicating a more advanced process.

Bacteriological examination (with the technical assistance of Mr. Minette):

Organisms isolated in pure culture on blood agar and chocolate agar are short, plump, non-motile, encapsulated, gram-negative rods. They have rounded ends and vary in size from approximately two to six microns. Agar slant: Growth white, moist, and spreading. Gelatin stab: White convex surface with no liquefaction.

Serum: Growth with no digestion of the medium. Nitrites produced from nitrates in 48 hours. Indole not formed. Sugar fermentation: Ferments glucose, levulose, mannitol, maltose, arabinose with production of acid but no gas. It does not ferment lactose. Saccharose is fermented only after 96 hours. Litmus milk: No change. Hydrogen sulfide not produced.

The patient's serum agglutinated the organism in dilution 1:80. Complement fixation was reported by Dr. Levine to be strongly positive up to a dilution of 1:320.

The patient's serum did not swell the capsule of the organism and did not inhibit growth when added to culture medium under aseptic conditions.

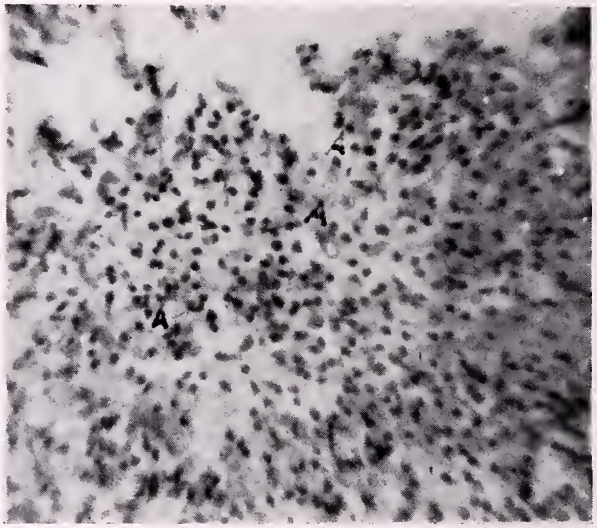


Fig. 3.—(Case 1) Mikulicz cells are shown at points marked "A".

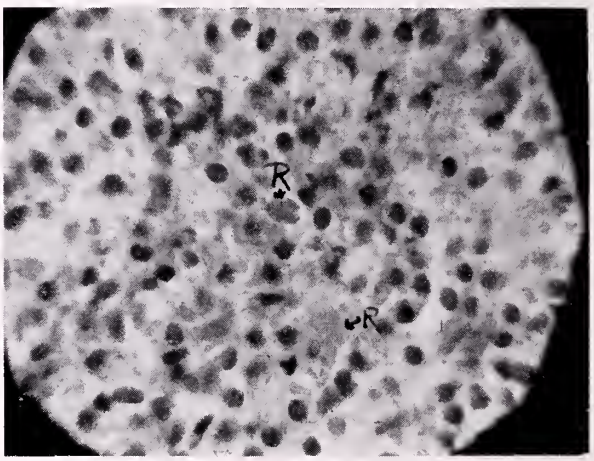


Fig. 4.—(Case 1) Russel's bodies are shown at points marked "R". The lower one is a plasma cell in process of changing. Its cytoplasm is intensely eosinophilic.

Comment

In this first case the lesion is that of the third stage in which Mikulicz' cells and Russel's bodies are usually present. At this point we would like to mention that even in the second stage, which, because of the predominance of plasma cells and

new capillary formation, may suggest syphilis, a diagnosis can be reached if the condition is kept in mind, the Wassermann is negative, and a culture is taken from the lesion.

It is well known from the studies of Maximow,[24] Ferrata,[25] and others that the plasma cells are derived from the reticulo-endothelium and may undergo various changes in the course of inflammation. Maximow described a process of pyknosis of the nucleus and protoplasmic regression, and Juspa and Negreiros-Rinaldi[25] a vacuolar degeneration of the protoplasm. It seems to us that in rhinoscleroma both processes take place, one of pyknosis and protoplasmic regression, which may lead to the formation of Russel's bodies, and the other of vacuolization, leading to Mikulicz' cells. Whether plasma cells contribute also to the formation of sclerotic tissue, or whether other reticular cells are involved in this process, it is not possible to say from the examination of sections.

Case Report

CASE 2.—A.C., a Portuguese male, age 54, was born in Honokaa and spent his life there. His occupation was that of field overseer on a sugar plantation. He was first seen on December 31, 1938. He complained of hoarseness of four months' duration, which was becoming gradually worse, and of shortness of breath. Pain and cough were associated with the beginning of the hoarseness. His past history showed nothing remarkable. Two brothers and sisters were living and apparently in good health. There was no nasal or postnasal discharge. The tonsils were not markedly enlarged but were red. There were thickening and edema of the cords on both sides, particularly the anterior portions of the cords. On the left side there was an ulcerated area on an indurated base involving the anterior half of this cord. The larynx was rather difficult to examine because of the patient's large tongue. A tentative diagnosis of carcinoma was made.

A direct laryngoscopy showed diffuse thickening of the anterior portion of both cords and a prominent induration with broken epithelium on the surface of the anterior portion of the left cord. A biopsy was taken from this area.

The Wassermann was negative on two occasions. There was no evidence of tuberculosis in the radiograph of the chest.

The pathologic report revealed a chronic inflammatory process and probable granuloma of the larynx. The pathologist remarked that the type of infiltration bore a slight resemblance to leprosy, although the same appearance could be produced by edema. (The large Mikulicz' cells may easily be confused with lepra cells, especially in a country like Hawaii where leprosy is endemic.) However, bacteriological examination revealed absence of Hansen's bacillus.

On January 24, 1939, the hoarseness had increased, there was some laryngeal obstruction, and the lesion in the left cord had increased in size. It appeared that the lesion was becoming obstructive and, with the indefinite microscopic diagnosis, that it might be malignant. Also, the biopsy might not have been taken from the proper area. On January 25, following a low tracheotomy, the larynx was exposed by laryngofissure and the major portion of the left cord removed with the lesion, which consisted of a hard nodule extending into the subglottic region. Its margin showed rather distinct demarcation from the slightly edematous tissue surrounding it.

Tissue sections were examined by several pathologists but the opinion was that the tissue was neither tuberculosis nor syphilis and that organisms of leprosy were not found.

Attempts were made to culture fungi from the lesion. A growth was obtained and the material was sent to Dr. Karl Meyer of the Hooper Foundation for examination. The fungus was studied by C. E. Smith of Stanford University who concluded that it was not Coccidioides immitis but, instead, a Basidiomycete. Guinea pigs injected intraperitoneally and intratesticularly with a heavy suspension of the fungus showed no signs of illness and no demonstrable lesions. Smith came to the conclusion that the fungus in question was nonpathogenic.

Because of the assumption that the lesion was either neoplastic or one of the more common granulomatous lesions (tuberculous, syphilitic, leprous, or coccidioidomycotic), the bacteriological study was rather neglected. One culture taken showed only staphylococcus.

The removal of the lesion brought improvement in the condition of the patient. Post-operative x-ray therapy amounting to 1080r was given. The lesion healed slowly. The tracheotomy tube was removed three months after operation. The last time he was seen, nine months after operation, he had a fair voice of rough quality. He was phonating with the ventricular bands. The right band was thicker than normal. The right vocal chord was normal. The left cord was absent and the mucous membrane on that side smooth. There was a good airway. The patient was breathing without difficulty and working steadily. He was not seen again. He died five years later with intestinal obstruction and cardiac asthma.

Recently, in light of the knowledge gained in the first case, the slides have been reviewed and a retrospective diagnosis of rhinoscleroma made on the basis of the cellular elements present (Fig. 5). This diagnosis appears reasonable, but it is unfortunate that further bacteriological and serological examinations cannot be carried out.

It is interesting to note that Farges, Barrat, and Berge[26] reported a case in 1942 in which nasopharyngeal and laryngeal lesions were removed surgically by electrocoagulation, the laryngeal lesions through laryngofissure.

Pathological Laboratory Examinations

Microscopic Description:

One section shows an epithelial surface and underneath the epithelium diffuse sclerosis which splits some muscular bundles present in one corner of the section. In several areas one is able to see small clusters of round cells, predominantly plasma cells, grouped chiefly around glandular lumina, and in the midst of them clusters of cells with clear or foamy cytoplasm. Here and there, however, are seen cells with clear cytoplasm as well as

[24] Maximow, A. A.: The Connective Tissue, In Maximow and Bloom, Text book of Histology, 4th Edition, Saunders, Philadelphia, 1942, page 60.

[25] Ferrata: Plasmazellen, in Le Emopatie, Soc. Ed. Libraria, Milano, 1934, page 415.

[26] Farges, M., Barrat, P., and Berge, C.: Un cas de rhinosclérome, Rev. de Laryng., 63:80 (Feb.) 1942.

cells with pyknotic nucleus and a cytoplasm intensely stained by eosin.

Another section shows a hyperplastic epithelium and some edematous fibrous tissue studded with numerous hemorrhagic areas. More numerous around the glandular lobules but present throughout the tissue are seen numerous plasma cells, polymorphonuclears, and fibroblasts. Among the plasma cells are noticed larger elements which have a foamy cytoplasm and which seem to be transitional between the plasma cells and cells with a clear cytoplasm. The tissue is very vascular and congested and blood cells are very common outside the vessel walls.

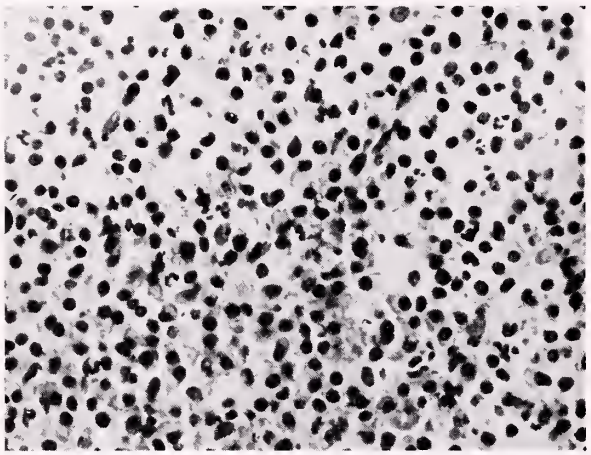


Fig. 5.—(Case 2) This field shows plasma cells, and cells with dark nucleus and clear cytoplasm (Mikulicz' cells), as well as polymorphonuclears and fibroblasts. In the lower right portion of the field is seen a cell with pyknotic nucleus and unevenly stained cytoplasm, probably a plasma cell undergoing transformation into a hyaline body (Russel's body). (Photomicrograph by Dr. I. L. Tilden.)

Sections from other parts of the larynx show essentially the same characteristics as those described already except for variations in the degree of sclerosis, vascularity, presence of polymorphonuclears, and so on.

Summary

We have reported what we believe to be the first two cases of rhinoscleroma recognized in the Hawaiian Islands. The condition may be more common than is generally supposed and should be strongly considered when a diagnosis of nonspecific granuloma of the upper respiratory tract is made from biopsy material. The second case must have originated in Hawaii. In the first there is presumptive evidence that the disease was contracted here but, because of the long incubation period, this cannot be stated with certainty.

Conclusions

1. Rhinoscleroma occurs in Hawaii.

2. The diagnosis can be readily established by complement fixation, bacteriological examination, and biopsy.

3. The treatment of choice appears to be surgical removal of isolated lesions supplemented by radiation therapy, or radiation alone when surgical therapy is impractical.

4. The disease should be suspected when a granulomatous lesion of the upper respiratory tract is encountered.

Acknowledgment

We are indebted to H. Minette of the Board of Health Laboratory, Hilo, for technical assistance and R. D. Fillmore, M.D., Kohala, for photographs of Case 1.

Discussion

DR. IRVIN L. TILDEN: The discovery of a new disease in Hawaii is a noteworthy event and important to all of us. The authors were kind enough to send me a slide from the first case, and I fully agree with the histologic observations which have been made. The clinical features and bacteriologic studies in addition leave no doubt as to the correctness of the diagnosis. In case 2 there can be little room for doubt although bacteriologic confirmation was not obtained.

The analogy between rhinoscleroma and leprosy is a good one, but mainly from the clinical rather than the histologic standpoint. Incidentally, it is lepromatous rather than tuberculoid leprosy to which the authors refer, since the latter does not involve mucous membranes. Upon careful analysis the histologic differences between these two diseases are really quite striking. This is in part true because the plasma cell, which is the hallmark of rhinoscleroma, is relatively infrequent in all types of leprosy, lymphocytes being much more numerous; and it is in part true because the large pale Mikulicz cells owe their appearance to some factor other than a high intracellular lipid content which characteristically produces the "foamy" appearance of the lepra cells. There can be no question, however, but that both the Mikulicz cells of rhinoscleroma and the lepra cells of lepromatous leprosy are derived from reticuloendothelium.

Perhaps a more striking analogy, at least from the histologic and bacteriologic standpoint, exists between rhinoscleroma and granuloma inguinale. This was emphasized by Dr. Spitz at the Seminar on Tropical Diseases of the American Society of Clinical Pathologists in 1944. Both are characterized by many plasma cells, and large clear cells which contain bacteria. These bacteria (the Donovan bodies) in the case of granuloma inguinale may be stained very beautifully by various silver methods devised for demonstrating spirochetes, and I saw a number of these preparations at the Army Institute of Pathology last year.

I would like to throw one slide on the screen which shows an unusually large number of Mikulicz cells. The eosinophilic Russel bodies, the plasma cells, and the dark staining clumps of bacteria are well shown. But I should emphasize that the basic histologic findings are identical with those in at least the first case presented by the authors, differing only in degree.

Acute Suppurative Appendicitis in Measles

ROGERS LEE HILL, M.D.
HONOLULU

IN 1886, Fitz[1] introduced the term acute appendicitis and proved that the symptoms of typhlitis were in reality due to acute appendicitis. This met with approval in this country and was generally accepted soon afterwards.

Measles[2] is an acute communicable disease manifested by fever, coryza, conjunctivitis, photophobia, buccal spots, lacrimation, and cough, which initiate a red maculopapular eruption over the entire body surface, terminating by a fine bran-like desquamation.

The widespread prevalence of measles is generally well known, few adults escaping the disease during childhood. Likewise, the frequency with which acute appendicitis is encountered makes it the most common major surgical disease today. The concomitant occurrence of the two diseases is uncommonly encountered, and pediatric textbooks fail in most instances to even casually mention the rare combination.

I was able to find a very brief mention of it in only one textbook,[3] Rolleston and Ronaldson's *Acute Infectious Diseases.* They emphasized temporizing because of the rarity of suppuration at any stage. This generally held concept has been due, no doubt, to the fact that abdominal symptoms are frequently encountered in measles, particularly in the prodromal stage, and have been definitely established as a pseudo-appendicitis syndrome of measles. We have many of us had the opportunity to observe this phenomenon at sometime in our clinical experience. The following excerpt from J. M. T. Finney's autobiography,[4] *A Surgeon's Life,* relating an incident, about 1900, typifies the pseudo-appendicitis syndrome.

Dr. Finney was called in consultation to see a 17 year old girl with some of the characteristic signs of acute appendicitis, namely: high temperature, rapid pulse, and abdominal pain with tenderness. Operation failed to reveal appendicitis, and thirty-six hours later she developed a typical measles rash.

The experience of Dr. Finney has been corroborated by almost all physicians who have had an extensive experience with measles. The pseudo-appendicitis syndrome has been so universally accepted that it has resulted in the adoption of a conservative attitude, and rightly so, because in the majority of patients the symptoms subside without local sequelae. Because of this attitude a few patients who have suppurative appendicitis are allowed to perforate, with a subsequent high mortality rate or prolonged convalescence from complications. At the Willard Parker Hospital,[5] where the most interest in this has been manifested, far-advanced appendicitis is the general rule, because of the apparent delay in diagnosis and surgical intervention.

In the report by Panum and Manicus of a measles epidemic on the Faroe Islands, in 1846, a syndrome that strongly suggests appendicitis is described. They speak of abdominal pain, rigidity, tenderness, and vomiting with death or slow recovery. Undoubtedly some of these were cases of measles complicated by acute appendicitis. Due to the fact that this occurred prior to the general recognition of appendicitis as a clinical entity, diagnosis was not made.

Credit is usually given to Williams[6] for the first description of appendicitis complicating measles. In 1901, he reported the case of a twelve year old boy who developed symptoms of appendicitis following the appearance of the rash. He was successfully operated upon by Cabot and the tissue report by Mallory revealed acute inflammation with concretion and pus within the lumen of the appendix.

In 1928, Popper[7] reported the case of a man twenty-six years of age with the signs of acute appendicitis. Under the operating light a measles rash was barely discernible and on the following day was well developed. In this same year Fischer,[8] reporting on 3,000 cases of appendicitis, noted the association of measles in three cases. All these recovered, but two had a very stormy convalescence.

Rost[9] believed that the association between the two diseases was rare and reported a case in a

Read before the Fifty-Seventh Annual Meeting of the Hawaii Territorial Medical Association, May 2, 1947.

[1] Fitz, R.: Perforating inflammation of the vermiform appendix with special reference to its early diagnosis and treatment, Am. J. Med. Sci. 92:321, 1886.

[2] Strong, R. A.: In Brenneman's Practice of Pediatrics, Hagerstown, Maryland. W. F. Prior Co., Inc. Volume 2, Chapter 11.

[3] Rolleston, J. D., and Ronaldson, G. W.: Acute infectious diseases, Third edition. 477 pp. St. Louis, C. V. Mosby Company, 1940.

[4] Finney, J. M. T.: A Surgeon's Life.

[5] Bullowa, J. G. M., McCabe, E. J. and Wishik, S. M.: Acute appendicitis in exanthems, Am. J. Dis. Child. 53:1029-1038, 1937.

[6] Williams, H.: Measles complicated by appendicitis, Boston Med. and Surg. J. 144:642, 1901.

[7] Popper, H. L.: Appendicitis und Masern, Medical Klin. 24:493, 1928.

[8] Fischer, A.: Appendicitis und Masern, Zentralbl. f. Chir. 55: 1546, 1928.

[9] Rost, F.: Uber Appendicitis bei Masern, Zentralbl. f. Chir. 55:905, 1928.

young boy, who developed a perforation of the appendix while under observation for measles. A successful drainage of an appendiceal abscess was accomplished, seven days after the onset of the symptoms, and twelve days after the onset of the measles. He made inquiries among various surgeons and pediatricians in Germany, but unfortunately did not state the number of cases collected. It was his opinion that the occurrence was of more than a coincidental nature, and that gangrene was apt to occur rapidly.

In 1932, Trepel[10] added two cases by Gottstein and Kutner to eleven of her own, collected between 1921 and 1931. She stressed the apparent fulminating aspects of the appendicitis and believed that operative delay was unwise. In this same year Ferru,[11] Herzberg,[12] Finkeldey,[13] Thenebe, Hirschberg, Cenci,[14] Davidson, Mora[15] and Hathaway[16] added another fourteen cases, occurring during the different stages of measles.

TABLE 1.—*Incidence of Measles in the Territory of Hawaii.*

	Number of cases	Cases of appendicitis	Incidence
Bullowa, McCabe and Wishik	6,357	11	.17%
Goodman and Silverman	8,997	24	.27%
Territory of Hawaii	41,080	3	.0073%

In 1936 Hudson and Krakower[17] added nine cases to the previously reported thirty-one, making a total of forty cases. They concluded that there was an intimate relationship between the two diseases and mentioned for the first time that measles might be an etiologic factor in the development of appendicitis.

Bullowa, McCabe and Wishik,[5] in discussing acute appendicitis in the exanthems, reported eleven cases out of a total of 6,357 (.17%) treated at the Willard Parker Hospital. This study was continued and elaborated upon by Goodman and Silverman[18] in 1943, with an additional 24 cases in 8,997 admissions, or a total of 35 cases of acute appendicitis among 15,354 measles patients (.23%). This makes a grand total of 75 cases reported in the available literature. Undoubtedly many cases have either not been reported or not been satisfactorily diagnosed.

TABLE 2.—*Incidence of Measles in the Territory of Hawaii, 1921-1946*

1921		328	
1922		2,211	
1923		195	
1924		505	
1925		362	
1926		1,481	
1927		288	
1928		425	
1929		598	
1930		1,499	
1931		1,982	
1932		20	
1933		28	X
1934		48	
1935		83	
1936		10,678	
1937		1,034	X
1938		98	
1939		151	
1940		3,070	
1941		737	
1942		150	
1943	}	948	
1944	}		
1944	July	978	X
1944	August	815	
1945	June 30,	10,374	
1946	June 30,	1,994	
		41,080	

X———Denotes year of occurrence of acute appendicitis in measles.

The incidence of occurrence of appendicitis in measles has been established by Bullowa, McCabe, and Wishik,[5] and Goodman and Silverman[18] as .23%, or 35 cases in 15,354 admissions. I was unable to find any other reference to the incidence of occurrence except vague statements as to its rarity, and Fischer's[8] collection of three cases of measles in 3,000 cases of appendicitis, which is of course valueless from a statistical standpoint. It occurred to me that while the above survey results in a mathematically accurate statement, the veracity of the interpretation could be subjected to considerable criticism. The Willard Parker Hospital is a large hospital in New York, established primarily for the treatment of contagious diseases. The chances are that there is likely to be an unusually large number of patients with measles admitted exhibiting the various complications. This would result in a discrepancy in statistics which would reveal a higher rate of incidence of appendicitis than would ordinarily be the case, if one considered the large number of cases treated at home with a proportionate low incidence of appendicitis, or none at all.

Here in the Territory of Hawaii we have an excellent opportunity for collecting data in making statistical surveys without the interjection of

[10] Trepel, G.: Chirurgische Komplikationen bei Masern, Monatschr. f. Kinderh. 54:1, 1932.

[11] Ferru, Perdous and Michiels: Appendicite suppurée au cours d'une rougéole compliquée de broncho-pneumonie chez un enfant, Bull. Soc. de pediat. de Paris. 30:203, 1932.

[12] Herzberg, M.: Giant cells in lymphoid tissue of appendix in prodromal stage of measles: report of isolated case, J.A.M.A. 98:139, 1932.

[13] Finkeldey, W.: Uber Riesenzellbefunde in den Gaumenmandeln, zugleich ein Beitrag zur Histopathologie der Mandelveranderungen im Maserninkubationsstadium, Virchows Arch. f. path. Anat. 281:323, 1931.

[14] Thenebe, C. L., Hirshberg, M., and Cenci, V.: Acute appendicitis as complication of measles Arch. Pediat. 50:28, 1933.

[15] Davidsohn, I., and Mora, J. M.: Appendicitis in measles, Arch. Path. 14:754, 1932.

[16] Hathaway, B. M.: Generalized dissemination of giant cells in lymphoid tissue of appendix in prodromal stage of measles, Arch. Path. 19:819, 1935.

[17] Hudson, H. W., Jr., and Krakower, C.: Acute appendicitis and measles, New England J. Med. 215:59, 1936.

[18] Goodman, M., and Silverman, I.: Acute appendicitis in patients with the common contagious diseases, New England J. Med. 228:533, 1943.

discrepancies and errors of interpretation as are likely to exist in mainland communities. I have been able in the past few years to collect three cases of acute appendicitis in measles in Hawaii by way of searching hospital files and personal inquiries. Since 1921 there have been 41,080 cases of measles reported to the Board of Health. Three cases of acute appendicitis in 41,080 cases of measles results in an incidence of .0073%, considerably lower than that reported by Bullowa, McCabe, and Wishik,[5] or Goodman and Silverman[18]. While some justifiable criticism may be advanced, due to laxity in reporting cases or improper diagnosis, I believe that in general it represents for the first time an accurate appraisal of the incidence of concomitant occurrence of these two common diseases.

Case Reports

CASE 1.—F.J., a white man, a patient of Dr. W. H. Wynn,[19] 26 years old, was admitted to The Queen's Hospital January 7, 1937, complaining of epigastric pain. He was nauseated and had vomited once. He also had a slight cold of four days' duration and associated cough. The pain settled in the right lower quadrant in twenty-four hours.

Physical examination revealed an injected throat, temperature 103, injected conjunctiva with lacrimation, and white flaky spots on the buccal mucosa. There was definite point tenderness over the appendiceal area. The urine was negative but no blood count was recorded.

On January 8, 1937, Dr. W. H. Wynn operated upon the patient under a general anesthetic and removed an acutely inflamed appendix covered with a fibrinous exudate. The temperature remained elevated and two days following operation a generalized maculopapular rash typical of measles made its appearance, and a history of exposure was obtained at this point. The measles ran a typical course and the cutaneous manifestations terminated with desquamation. No abdominal complications were observed and the patient was discharged on the eighth day, apparently recovered from both the measles and the appendicitis.

Pathological report: The appendix was 8 cm. long, the lumen dilated and filled with purulent fluid. Microscopic section revealed a diffuse polymorphonuclear infiltration throughout all of the coats, with beginning necrosis of tissue. It was diagnosed as an acute suppurative appendicitis.

CASE 2.—An Oriental male about nine years of age was seen by Dr. Merton Mack[20] during a measles epidemic of the early 1930's, with typical general and cutaneous manifestations of measles. There was no doubt about the diagnosis, and other members of the family were also ill with the same disease. He had high fever and some abdominal discomfort but not much pain. There was some distention present which persisted after an enema.

A diagnosis of appendicitis could not be made on the abdominal findings at this time. Under observation the discomfort and distention persisted and it became apparent that there was a strong possibility of appendicitis associated with the measles. He was sent to a hospital where a laparotomy revealed an acutely inflamed appendix with free fluid in the peritoneal cavity. The record is not available, unfortunately, and Dr. Mack does not remember the surgeon. He stated, however, the diagnosis was definitely established at the time and he was pretty sure peritonitis did not ensue, as the convalescence was uneventful.

CASE 3.—J.S., a Portuguese-English girl, seven years of age, was admitted by me to The Children's Hospital, Aug. 29, 1944 with a complaint of left lower quadrant abdominal pain of eight hours' duration. Her mother stated that she had had a cold for a few days and that there had been a definite exposure to measles. Examination revealed a temperature of 105 with moderate dehydration, tachycardia and extreme restlessness. She had a definite cold associated with a cough and mildly inflamed conjunctiva. The skin exhibited a slight rash over the face. Abdominal examination revealed moderate tenderness in the left lower quadrant.

The abdominal pain continued and was associated with nausea and vomiting. On the following day she appeared quite ill. The temperature was elevated and the abdomen revealed marked tenderness and muscle spasm in the left lower quadrant. The heart appeared to be in the normal position and there was normal right-sided liver dullness. The white blood count had increased to 21,000, the majority being polymorphonuclear leukocytes. The rash had become more evident, was more generalized in nature, and appeared to be unquestionably measles.

After preliminary hydration, a general anesthetic was administered and a left lower rectus incision revealed a gangrenous appendix surrounded by foul smelling pus and acutely inflamed adjacent loops of bowel and bladder. It apparently originated from the cecum, which occupied a mid-line position, and lay in the left lower quadrant behind the bladder and sigmoid colon. The appendix was removed and drains were inserted behind the bladder and well down into the pelvis.

Her post-operative course was very smooth for the first seven days, temperature declined quickly to 99F. and her general condition improved, with the disappearance of the rash, which was followed by the typical desquamation.

One week after the operation, she developed a bilateral otitis media which necessitated drainage. She continued to run an elevated temperature with peaks up to 105F. She developed pain, tenderness, and muscle spasm in the right upper quadrant associated with an elevation, irregularity and immobility of the right hemidiaphragm. There was a questionable mass also in the right lower quadrant. These signs and symptoms increased despite sulfathiazole, parenteral sulfadiazine and penicillin therapy. After repeated small blood transfusions, the right subphrenic space was explored and although no pus was encountered, a marked inflammatory reaction was present in this area. Under the anesthetic a mass in the right lower quadrant was palpable, which was drained in an extraperitoneal approach.

Following this procedure she improved until Oct. 5, 1944, at which time she developed a pelvic abscess that was successfully drained through the rectum. Her wounds healed and she was finally discharged from the hospital on Oct. 20, 1944, greatly improved, and slowly returned to normal.

[19] Personal communication and Queen's Hospital record.
[20] Personal communication.

Pathological report by Dr. Thomas Fujiwara:

The appendix is 7 cm. long and grossly gangrenous in areas. There is a fecalith in the mid portion. The lumen is filled with necrotic material. Sections taken show the wall to be greatly thickened, edematous and in many areas completely necrotic. Sections taken from the less inflamed process revealed, in addition to the acute inflammatory process, marked hyperplasia of the submucosal lymphoid tissue. Within the germinal centers are numerous multinucleated masses which present vesicular nuclei similar to those of the early lymphoid and reticulo-endothelial cells. The cytoplasm is very scanty and the cell outline is indistinct. They are unlike the foreign body giant cells or the Langerhans cells found in tuberculosis. Diagnosis: Acute purulent appendicitis. Measles.

Discussion

In 1931, Warthin[21] and Finkeldey[27] described multinucleate giant cells in tonsils, adenoids and adjacent mucous membranes in the prodromal stage of measles. These had been previously described by Alagna in 1908 but its importance had escaped attention.

Herzberg[12] reported in 1932 the finding of similar giant cells in the lymph follicles of an appendix removed from a child six years old, who had a typical measles rash following the operation. Davidsohn and Mora[15] described the characteristic giant cells in four cases and noted that they were more abundant in the prodromal stages, than in those after the eruption was well developed. They attributed the scarcity at this stage to the diffuse inflammatory reaction which obscured the picture.

In 1935 Hathaway[16] reported the autopsy findings in suppurative appendicitis in measles and discovered the multi-nucleate giant cells in the spleen and scattered lymph nodes. Since then they have been found in many appendices by observant pathologists. Hathaway described these giant cells as characteristic and unlike other giant cells in appearance and location.

The cells are large, round or irregular shaped with much basophilic or eosinophilic cytoplasm. There may be from three to fifty, round lightly staining nuclei characteristically clumped together in the center of the cell. These giant cells are now recognized as a specific reaction to the measles virus or its toxin[27, 28] and have been called the Warthin-Finkeldey giant cells of measles.

In 1933, Fischer[22] and Shultze,[23] working independently, were able to correctly diagnose measles by identifying these giant cells in an otherwise normal appendix. In each instance the patient developed a typical rash as predicted by these pathologists.

Gordon and Knighton[24] have recently utilized the giant cell reaction as a criterion for the transmissibility of measles from man to monkey.

A careful study of all the available case reports of appendicitis in measles reveals some important clinical facts. The onset of the abdominal symptoms may occur at any phase of the contagious disease, but is more frequent after the cutaneous manifestations appear. This observation is important because it reveals the astonishing fact that practically all of these cases developed peritonitis from perforation of the appendix. The time interval between onset of symptoms and operation averaged three days. It is evident, at once, that the delay in diagnosis or surgical intervention is due chiefly to the presence of the *rash*. This delay has not been evident in those cases exhibiting abdominal symptoms during the prodromal or pre-eruptive stages of measles, and consequently the majority of unperforated appendices fall in this class.

This delay in diagnosis or surgical intervention with subsequent perforation and its attendant complications is due to the following causes:

1. The concomitant occurrence of two diseases. From time immemorial physicians have been loath to make two diagnoses, when one diagnosis will suffice to explain all symptoms. This precedent, often emphasized by Osler, has become so well established that it is difficult to abolish.

2. The presence of the pseudo-appendicitis syndrome. The abdominal symptoms of measles have long been known and have led to many untimely and unwarranted operative procedures. Differentiation between the pseudo-appendicitis syndrome and acute appendicitis may be extremely difficult but is very important, if one wishes to eliminate unnecessary or untimely operations and still prevent perforation and peritonitis. Some help may be obtained by realizing that the pseudo-appendicitis syndrome only occurs in the prodromal stages, and the development of abdominal symptoms after the rash occurs is likely to be due to acute appendicitis. The leukocyte count is of some value as it will usually be low in the pseudo-appendicitis syndrome while in acute appendicitis, the polymorphonuclears respond as they do without the underlying contagious disease. Careful observation of the case exhibiting abdominal pain in the pre-eruptive stage is necessary

[21] Warthin, A. S.: Occurrence of numerous large giant cells in tonsils and pharyngeal mucosa in prodromal stage of measles: report of 4 cases, Arch. Path. 11:864, 1931.

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[24] Gordon, H., and Knighton, H. T.: Experimental measles: lymphoid tissues of animals inoculated with virus of human measles, Am. J. Path. 17:165, 1941.

because acute appendicitis may also occur at this time.

3. The presence of the rash may divert the physician's attention away from the abdominal signs.

4. Hesitancy to recommend operation. From all of the data reviewed an operation during measles may safely be performed. There have been no serious respiratory complications. Recovery has usually been satisfactory.

5. The protean nature of the symptoms of acute appendicitis in childhood. The average age of the collected cases was 5 to 8 years, with males predominating. It is occasionally wiser to proceed with an operation in case of serious doubt, due to the extreme difficulty in arriving at a correct diagnosis in children.

Finally, the development of acute appendicitis in measles may be purely coincidental or it may be related in a manner similar to respiratory or enteric infections, as has been long suspected. The fact that the pathogenesis of appendicitis is still not clearly defined makes a discussion of the intimate relationship of the two diseases difficult. Etiologic factors such as obstruction, interference with blood supply and bacterial invasion by hematogenous or enteric routes have all been postulated.

An attempt to correlate and unify the above facts into an orderly sequence of events, while inconclusive, necessitates the development of a theory. Two theories have been postulated and elaborated by various authors.

The first theory is that the lymphoid hyperplasia, with or without catarrhal enteritis, sets up a chain of circumstances leading to interference with drainage and circulation in the appendix and resulting in bacterial invasion. The evidence in support of this theory is that measles cause a moderate hyperplasia of lymphoid tissue throughout the body, including the appendix, which is well endowed with lymphoid structures. Some credence may be given to this theory by the demonstration of Hwang and Krumbhaar,[25] that the percentage of lymphatic tissue in the appendix is greatest between the ages of one and ten and the female appendix contains less lymphatic tissue than the male throughout life.

The second theory is that the pathogenic agent of measles, being a filterable virus, present in the blood and nasal secretions, may reach the appendix and traumatize the organ sufficiently to cause a virus appendicitis. This may then predispose the tissue to further invasion by bacterial organisms. The pseudo-appendicitis syndrome of measles may in reality be an appendicitis due to an actual inflammation of the appendix of virus origin.

Under ordinary circumstances the abdominal symptomatology[26] may be specific enough to warrant early diagnosis and removal of an inflamed appendix. Under other circumstances, in which the abdominal symptoms develop during the course of a non-related disorder, there may be a strong tendency to correlate the symptoms with the pre-existing disorder, rather than to explain them on the basis of an independent lesion. The incorrect interpretation of the abdominal symptoms results in a delay in diagnosis and endangers the life of the patient, whose best chance for survival depends upon the early removal of an inflamed appendix.

Summary

A discussion and review of the literature concerning the concomitant occurrence of appendicitis in measles is included in this study. The reported incidence of occurrence has been given as .23%. Three cases of appendicitis are reported in the Territory of Hawaii in 41,080 cases of measles reported to the Board of Health since 1921. The incidence of occurrence is .0073%.

The presence of characteristic giant cells of measles in the appendix is described and a discussion of their relative importance is given.

The causes of delay in diagnosis and surgical intervention are discussed, and the chief deterrent in the past has been the presence of the rash which tended to divert the attention from the abdominal symptoms to the general manifestations of measles, with subsequent appendiceal perforation and its attendant complications. The importance of differentiating between the abdominal symptoms of measles and the concomitant occurrence of acute appendicitis is stressed in order to prevent unwarranted operative procedures or temporizing measures, which are prejudicial to the best interests of the patient as his best chances for survival lie in the early removal of an acutely inflamed appendix.

There is some evidence that the concomitant occurence of appendicitis in measles is more than of a purely coincidental nature.

Young Hotel Building

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Management of the Allergic Patient

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THE management of the allergic patient may be approached in several ways. In individuals in which the specific etiological factors causing the allergic reactions have been uncovered, the principles of treatment are aimed at two objectives, namely;

1. The elimination or avoidance in the environment and diet, of both specific and contributory factors.
2. Desensitization (lessening of sensitization) to factors which cannot be completely avoided.

In individuals in which the specific etiologic factors cannot be determined, and also as an aid and adjunct in the control of acute phases of the disease a third method presents itself;

3. Symptomatic treatment including drug therapy.

To the above three methods may be added a fourth whose usefulness is gaining wide recognition among men in the field of allergy;

4. Prophylaxis.

Elimination and Avoidance of Specific Allergens

The ideal mode of treatment of an allergic individual is the complete abstinence from and avoidance of contact with all specific factors which call forth his allergic response. This is ideal because it obviates other modes of therapy, but is only successful in a small percentage of cases, and only in those few manifesting sensitivity to a single or at most a few specific allergens. As an example, an individual sensitive to shellfish, and perhaps one or two other allergens, like mushroom and mustard, if intelligent and observant can cure himself by simple abstinence from the offending foods. On the other hand, one clinically sensitive to wheat, eggs, milk and perhaps cottonseed presents an entirely different problem, one which taxes our ingenuity and demands our every effort. In many instances a mere trace of a specific food in the diet may precipitate symptoms and upset a well organized program of management. It is therefor not sufficient to merely tell the patient to avoid wheat, eggs or milk, but to instruct him how these items are used, and what products contain them, not only the products but frequently the brand.

Clinical food sensitivity as a rule is more prevalent in infancy and childhood, but experience here seems to indicate that the incidence in adults in the islands is greater than that found in the mainland. This observation is based on therapeutic tests and not on skin tests alone.

When one adds the avoidance of environmental factors to those of food, one is faced with a problem which calls for absolute understanding of what is required to be done by the patient, and for his complete fulfilment of these requirements. This is a matter of education of the individual patient, the responsibility of the physician handling the case. To eliminate dusts from the environment calls for meticulous attention to every detail. It is not possible to completely avoid allergic active dusts in a patient's environment. One aims however at the control of such dusts in chosen places in the environment, principally where the dust-sensitive patient comes in contact with effective dusts in greater concentrations and for a longer period of time than he does elsewhere: in the bedroom, for example. Allergic active dusts are chiefly products of the processes of ageing and decomposition of organic materials, such as cotton, kapok or silk floss, feathers and similar materials used in the stuffing of mattresses, pillows and furniture. It has been shown that such ageing and decomposition occurs with greater rapidity in warm, humid climates than in colder areas. To attain as nearly perfect dust control as possible, dust-sensitive cases are instructed to completely encase mattresses and pillows with an impervious material, in addition to maintaining their homes in as dust-free a condition as possible. Where such precautions are carried out, prompt relief is usually obtained.

The use of mechanical air filters with a high degree of efficiency for dust and pollen removal has been repeatedly demonstrated to be effective. For this method, filters of the cellulose type are far more efficacious than the impingement or water type of filtering device.

The elimination from the environment of other inhalant factors such as animal hairs and danders, silk, wool, orris root and pyrethrum is comparatively simple if attention is paid to the minutiae of home management.

Read before the Fifty-Seventh Annual Meeting of the Hawaii Territorial Medical Association, May 2, 1947.

Desensitization

In many instances it is quite impossible to completely avoid offending allergens because of their ubiquitous nature. Among these may be mentioned pollens, and air-borne mold spores. Desensitization must be carried out for their control.

Desensitization, a term now widely used by clinicians, indicates, as it does in anaphylaxis, the method by which sensitization is either decreased or removed. Hyposensitization, a term introduced by Cooke, more nearly applies to this form of treatment in man, and implies a lessening of sensitization without any manifest effect on the antibodies.

Desensitization may be either specific or non-specific. In specific desensitization, therapy is directed toward a lessening of sensitivity to one or more specific allergens to which an individual may be clinically sensitive, such as pollens, dusts, air borne molds, orris root and others. The factors which influence the choice of allergens for desensitization therapy, are:

a. The patient's degree of sensitivity.
b. The patient's ability to completely eliminate or avoid the specific allergen or allergens.
c. The nature of the specific allergen.

Specific desensitization may be achieved in two ways: by injection, in which initially the tolerance of the patient is determined, and therapy carried on over a protracted period of time; and by oral administration.

In instituting treatment by injection, it is wise to begin with the lowest concentration of an allergen which gives a positive skin reaction. This may vary greatly. For example, the initial dose in a highly sensitive cottonseed case may be 0.1 cc of 1:1,000,000,000 or in a moderately sensitive case, 0.1 cc of 1:100,000. With house dust extracts the concentration of the initial 0.1 cc dose may vary from 1:1,000 to 1:10. The patient's degree of sensitivity is the yardstick by which his initial dose is measured.

Doses are increased gradually, the increments varying with the type of allergen, the amount of local reaction and the presence or absence of constitutional reactions. As a rule an increment of from 33% to 50% is safe in the weaker dilutions. In higher concentrations the increment is decreased.

There is no stipulated maximum dose. One aims at a top dose which may vary from 100 to 1,000 times the initial dose. Many patients do better on frequently repeated small doses, and still others on minute intradermal amounts. There is no set rule to follow either as to the amount to be given nor the method to be used. Experience gained in handling large numbers of patients plus careful attention to an individual patient's reactions, dictates which method to use in an individual case.

For oral desensitization, increasing quantities of the offending food are given by mouth either in its intact form or after certain modifications. In food allergies this method is to be preferred over the injection method. The injection method is seldom employed in food sensitivity except where the specific food acts both as an inhalant and ingestant allergen.

The dosage, interval and preparation to be used in oral desensitization vary with the degree of sensitivity of the patient and the particular food to which the patient reacts clinically. The same principles of desensitization apply in the oral method as they do in the other types, that is, the first dose is given in a dilution which fails to give a positive skin reaction, and subsequent doses are increased gradually, either slowly or rapidly according to the response of the patient. Oral desensitization is usually instituted only for foods which are of major importance in the diet, such as wheat, eggs and milk.

Oral desensitization by means of specific peptones and propeptans has been advocated by Urbach. The specific peptones produced by the peptic digestion of the various food items are given an hour before the patient is to ingest a meal which will contain the food to which he is sensitive and from which the specific peptone has been prepared. It is stated that after a short period of this therapy, patients are able to tolerate the offending food without production of symptoms. Further experience will be necessary to evaluate the efficacy of this method of therapy.

Non-specific desensitization is frequently used when it is not possible to ascertain by any known diagnostic means, including clinical tolerance and therapeutic trial tests, the specific excitants which precipitate symptoms. It is also of value in patients who fail to respond to specific desensitization. The method aims at altering, by non-specific means, the reactivity of the patient to specific allergens. The true nature of the mechanism involved is not clearly understood.

Numerous agents have been employed, notably bacterial vaccines, either stock or autogenous. Very satisfactory results were obtained in a group of chronic asthmatics, using an autogenous (facultative) anerobic vaccine. Such vaccines must be given with the greatest of caution. Among the other non-specific agents which have been used may be mentioned tuberculin, peptone, sterilized

milk, histamine, autohemotherapy, and more recently Hapamine (histamine azoprotein, Parke, Davis).

Symptomatic Treatment Including Drug Therapy

During the period of allergic survey, or while methods of avoidance or desensitization are being carried out, it is usually necessary to provide symptomatic relief for the patient. General measures to improve hygiene are of paramount importance. The removal of foci of infection, as diseased tonsils or teeth, are advisable only if it will better the general health of the allergic. It is to be remembered that surgery may aggravate existing allergic conditions or may precipitate an initial allergic response in the potentially sensitive patient. This is of such frequent occurrence in certain areas, that tonsillectomy in potentially allergic children is not advised during periods of heavy pollination.

Drugs for the relief of allergic symptoms have run the gamut of therapeutic agents. The drug *par excellence* in the control of any allergic manifestation is adrenalin. It is the old standby, and produces results in all but a few isolated cases. It may be given by injection or inhalation. It usually has a prompt effect and relief therefrom is more complete and prolonged, despite its fleeting character, than from any other drug. It should be given early in an attack and in adequate doses. Individual tolerance to the drug varies widely. Fatality from its use has never been recorded. It is without question the most valuable drug we have for the treatment of allergic episodes.

Ephedrine, both the natural and synthetic and its many preparations both for oral as well as local use are well known to all. It is of value in mild or moderate attacks, and frequently gives prompt relief if administered early. In cough mixtures it is ideal. However, many patients develop an ephedrine "fastness" from its prolonged continued use, which quickly disappears upon its withdrawal.

Other drugs which have been used are aminophyllin, caffeine, ergotamine tartrate, the atropine group or parasympathetic inhibitors, iodides, endocrines, the opium group and many others. Morphine should always be administered with caution. Although at times it is exceedingly valuable in severe asthmatic attacks when adrenalin even in massive doses fails, it should nevertheless be chosen with care, because of its depressant action on the respiratory center. A much better drug to break such an attack is ether, administered either as a rectal anesthetic or by the drop method. In cases of status asthmaticus, intravenous dextrose has given most brilliant results.

Recently several new antihistaminic drugs have become available. Like all drugs, they have their limitations. A resume of observations of several committees and groups established to study the effects of these medicaments is here presented. Both Benadryl and Pyribenzamine appear to be effective in the control of a large percentage of individuals with vasomotor rhinitis and urticaria, and in acute whealing due to drugs and biologicals. Like adrenalin, they are not curative, but used only for symptomatic relief until approved allergic management becomes effective. Experience in large series indicates that asthmatics are but poorly relieved. Their effects are not as prompt nor as lasting as with ephedrine. Benadryl sometimes has marked side effects, whereas pyribenzamine apparently produces but few untoward reactions.

Prophylaxis in Allergic Diseases

The ideal prophylactic approach is through the medium of eugenics, but this is not practical. Allergic individuals may be warned that the allergic predisposition is likely to be transmitted to a large percentage of their offspring. This, however, seldom acts as a deterring influence.

Attempts at the control of congenital acquisition of sensitiveness based on experimental data, have likewise been tried. Regulation of a mother's diet during pregnancy, controlling excessive ingestion of certain highly allergenic foods, has been discouraging.

Of distinct value are the measures instituted in the postnatal period for children of allergic parents. These children should be watched carefully for the first signs of allergic manifestations, and therapy instituted promptly. Frequent colds in children should be viewed as allergic in character. The institution of avoidance of inhalant factors in the home is of definite value as a prophylactic measure. The early recognition and treatment of hay fever and other inhalant sensitivities definitely minimizes the incidence of bronchial asthma in later life. The treatment, however, must be properly and adequately carried out to be of value as a prophylactic measure.

The problem of allergy will perhaps never be completely solved. Much has been accomplished since von Pirquet and Bela Schick coined the word *allergy*, four decades ago. Much can still be accomplished. It is only by diligent effort, keen observation and meticulous attention to the minutiae of management that lasting results can be obtained.

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NOTE: References and bibliography will be included in the author's reprints.

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[EDITORIALS]

THE MOVEMENT FOR NATIONAL "HEALTH LEGISLATION" IS A COMMUNIST MOVEMENT!

Criticism of certain groups and factions—notably Communists, labor unions, and certain racial groups—has so often been based on reactionary emotional attitudes and prejudices, that it has acquired a bad name. It is often called "baiting" —an allusion to the senseless and cruel practice of teasing a chained animal, usually a bear, just to make it angry.

The recipients of such criticism have not been blind to the great advantages of this situation. They have, ever since it arose, screamed "baiting" at any and every criticism of their actions, whether it actually *was* baiting, or whether it was sound and significant criticism.

We are not concerned just now with criticism of Communism. But—whether *you*, and *you*, would enjoy living in a Communist-dominated country or not—you should at least know that *the advocates of compulsory sickness taxation on a national scale are being connected with Communists, and Communist "front" organizations, and Communist sympathizers, with increasing frequency.*

William Gerard Reidy, who began work for Senator Robert Murray two days before the Senate hearings on S.545 and S.1320 started, was an employe of the Farm Security Administration and later of the Federal Public Housing Authority, originally as a "Cooperative Specialist in Health Services." He gave as reference, in an application for a job, the name of Dr. Alexander Meikeljohn, who has been active in Communist-front organizations. As a "consultant" to the Committee on Medical Economics, which published two of the leading lobbying pamphlets for compulsory sickness taxation, he is a co-columnist with "Mike" Davis in writing a health column for *Survey Graphic.*

Dr. Ernst P. Boas, chairman of the Physicians' Forum, a local political organization of doctors who openly favor medical collectivism, was the first witness in favor of S.1320, the new compulsory sickness taxation bill sponsored by Wagner, Murray, Pepper and several lesser lights. He is a member of several Communist-front organizations. He has admitted engaging in lobbying (for the Wagner Murray Dingell bill) without registering for the purpose, as he is required by law to do.

Mr. Jacob Fisher, documented by the House Committee on un-American activities for almost uninterrupted association since 1939 with various Communist-front and fellow-traveller organizations, is a member of the staff of Mr. Isadore S. Falk of the Social Security Board. Mr. Falk tried to have Mr. Fisher sent to New Zealand to study compulsory sickness taxation there, on June 15. Fisher had previously prepared a statement on the New Zealand system, designed to show that the criticisms of it by the American Medical Association were in error. Statement first, study later: the sequence is an interesting one, reminiscent of the horse following the cart.

The Committee for the Nation's Health is the chief lobby for the nationalization of medicine, and its chief, Michael Davis, claims that it is merely a neutral "service" organization. Yet it co-operates with the International Workers'

Order, a leading Communist group. The Physicians' Forum, too, advertises through the International Workers' Order; and the Federal Security Agency, the Public Health Service and the Farm Security Administration have all supplied movies for distribution by the I.W.O.

House Report No. 786 of the 80th United States Congress, entitled *Investigation of the Participation of Federal Officials in the Formation and Operation of Health Workshops*, of the Third Intermediate Report of the Committee on Expenditures in the Executive Departments, submitted July 2, 1947 and signed by Representatives Forest A. Harness, James W. Wadsworth, Henry J. Lathan, Carter Manasco and J. Frank Wilson, concludes its six and a half pages with the following paragraph:

"Suffice it at this time for your committee to report its firm conclusion, on the basis of the evidence at hand, that American communism holds this program [for socialized medicine] as a cardinal point in its objectives; and that, in some instances, known Communists and fellow-travellers within the Federal agencies are at work diligently with Federal funds in furtherance of the Moscow party line in this regard."

It is obvious that, whether the movement for compulsory sickness taxation is a good thing or a bad thing, the Communists figure prominently in it. It is always a good idea to know who else is on your team. Who is on yours?

"IS THE PATIENT UNDER, DOCTOR?"

The American Society of Anesthesiologists resolved, at its meeting last June in Atlantic City, that it disapproved "of the training of persons other than doctors of medicine in the science and art of anesthesia, for the assumption of responsibility in the care of patients where it may be necessary to exercise medical judgment, and particularly . . . of the issuance of certificates for such training by its members." The Society also disapproved of departments of anesthesiology being directed by anyone but "doctors of medicine actively engaged in the practice of Anesthesiology." They recommended at the same time that all medical schools and hospitals establish a department of "Anesthesiology" under the direction of "a doctor of medicine actively engaged in the practice of Anesthesiology."

The phrase in the initial objection, "where it may be necessary to exercise medical judgment," is a somewhat vague one; its implications, if not its intent, seem unduly broad. Surely every anesthetist must be expected to "exercise medical judgment" during the administration of an anesthetic. Just as surely, the administration of the average anesthetic is not so complex a problem that competence in it can be achieved only by a doctor of medicine. Have the nurse anesthetists done so poor a job that they need to be replaced by M.D.'s? We doubt it. We trust that such was not the intent of the Society in promulgating this resolution. And we suggest that, if it was not their intent, the Society say so.

THE HAWAII MEDICAL JOURNAL BECOMES THE OFFICIAL PUBLICATION OF THE HOSPITAL ASSOCIATION OF HAWAII

With this first issue of its seventh annual volume, the HAWAII MEDICAL JOURNAL becomes the official organ of The Hospital Association of Hawaii. This is primarily an organization of Hawaii's hospitals—*all* of them, except, as this is written, the newly reorganized Ewa Hospital—, together with individuals either engaged, or interested, or specially qualified, in some field of hospital planning or administration.

It is expected that from time to time, if not in every issue, a separate section of the JOURNAL will be devoted to announcements or informational items or original papers, dealing with this vital phase of medical work. We are proud of the opportunity to represent, now, not only the Territory's physicians and the Territory's nurses, but also the Territory's hospitals.

INFANT IMPETIGO FROM NURSES' NOSES

A painstaking inquiry into the epidemiologic and bacteriologic aspects of what is known in America as staphylococcus impetigo or bullous impetigo or impetigo neonatorum, and in England as pemphigus neonatorum, is reported in the July 5 issue of the *British Medical Journal* by V. D. Allison and Betty C. Hobbs. It covers lesions of this disease and an associated staphylococcal conjunctivitis affecting 132 infants in a large maternity hospital in Cardiff, over a two year period.

Their conclusion was that the most important source of infection was the nasal secretions of nurses who were carriers of the causative organism. The mode of transmission appeared to be via contaminated hands for the most part. Their report should be read in detail by those charged with the responsibility of administering hospital nurseries, for they outline several preventive measures in great detail.

GONORRHEA—IS IT COMPLICATED BY SYPHILIS?

A word of caution regarding the treatment of gonorrhea with penicillin seems in order at this time. It is well known that a person who is infected with both gonorrhea and syphilis at the same time will usually show evidence of gonorrhea several days before the lesions of syphilis appear. If the person who contracted both diseases at the same time is treated with penicillin for the gonorrhea as soon as it appears, the course of the syphilis will be altered so that the lesions will be slow in appearing or may not appear at all, but the person will eventually develop a positive blood test for syphilis. The lesions of syphilis may not appear for as long as six months after exposure. Of course, the patient who has lesions suggestive of syphilis as well as positive evidence of gonorrhea should have repeated darkfield examinations of the lesions as well as serologic tests before the gonorrhea is treated with penicillin. The alteration of the course of the syphilis is due to the dosage of penicillin which is used for the treatment of gonorrhea being inadequate for the treatment of syphilis.

Recently a prostitute was arrested in Honolulu who had both gonorrhea and primary syphilis. This woman catered to Filipino men more than to any other group. It is strongly urged that all doctors who see Filipino men with gonorrhea check them closely for evidence of syphilis over a period of six months if possible. Especially is this indicated since these men will be treated with penicillin for the gonorrhea in almost all cases.

WALTER B. QUISENBERRY, M.D.

HOSPITAL-OPERATED OUT-PATIENT CLINICS

The Queen's Hospital on August 4, and the St. Francis Hospital officially on August 18, began the operation of out-patient clinics. The move was made with the dual purpose of providing better and less expensive out-patient care than had been possible at Palama Settlement's medical department, ably run these many years by Dr. Joseph Lam, and also of conforming to the educational standards set by the American College of Surgeons for Class A hospitals.

Now that the hospitals have the ball, it is up to them to keep it moving in the right direction. Palama did a good job for a long time, and established a record of satisfying public service that will not be easy to equal. The new out-patient clinics have a lot in their favor, but it will take plenty of work to get them running in a manner that will equal Palama in regard to public satisfaction. And that, in the long run, is what will determine their success.

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POST-GRADUATE LECTURES

III. THE HEMORRHAGIC DISORDERS*

CYRUS C. STURGIS, M.D.

The presence of bleeding into the skin and mucous membranes, the failure of the blood to clot normally, and excessive loss of blood from minor wounds, frequently portend an ominous outlook. On the other hand, such conditions have many and diverse causes, and although some are of a serious nature, others are of relatively minor consequence. An abnormal hemorrhagic tendency is characterized by bleeding into the skin, mucous membranes, muscles, from the oral nasal cavities, from the kidneys, bowels and uterus, or into the brain. In fact, hemorrhage may occur into almost any tissue of the body, either following slight trauma or arising spontaneously.

There are three well recognized mechanisms whereby an abnormal tendency to bleed may develop. Their importance, in order of frequency of occurrence, may be stated as follows: (1) increased permeability of the capillaries (non-thrombopenic purpura), 66 per cent; (2) diminution in the number of blood platelets (thrombopenic purpura), 22 per cent; (3) defects in the constituents of the normal clotting mechanism, 7 per cent; (4) unclassified, 5 per cent.

Bleeding Due to Increased Permeability of the Capillaries

This is the most common type of abnormal bleeding which is assumed to be due to increased capillary permeability. Evidence favoring this is that the tourniquet test is usually positive, the blood platelets are normal in number, there is no abnormal variation in the amount of prothrombin present or other abnormalities of the clotting mechanism. The bleeding time and clotting time are normal. The diagnosis of this type of purpura is usually made on the presence of a positive tourniquet test, and the absence of any other abnormality of the blood. It may be associated with different causes, as follows:

1. It is the characteristic rash of a number of infectious diseases as epidemic meningococcus meningitis, typhus fever, and others; and abnormal bleeding on this basis accounts for the hemorrhagic type of various infections. Examples of this are hemorrhagic smallpox or measles.

2. It is observed in acute or more commonly chronic glomerular nephritis, usually in association with the uremic state. The explanation usually given is that it is due to "toxins."

3. Allergic purpura associated with increased capillary permeability is undoubtedly a clinical entity but it must be admitted that our knowledge concerning this is incomplete. It is observed in patients who are sensitive to certain drugs (potassium iodide, phenobarbital, and belladonna), and probably to various articles of diet. [It is usual for the tourniquet test to be negative in this form of purpura.—ED.]

4. The most important type of purpura due to increased capillary permeability is that resulting from a deficiency of vitamin C, or scurvy. This rarely occurs in civilized countries under normal conditions of living. I have seen it, however, in patients with peptic ulcer, who have been partaking of a diet, usually of their own devising, from which vitamin C had inadvertently been excluded.

5. Hereditary hemorrhagic telangiectasia. In this condition, which is definitely hereditary, there is apparently an imperfection of the capillary wall which permits undue bleeding following slight trauma. In most patients, as the result of the loss of blood, usually from the gastro-intestinal tract or from repeated epistaxis, there is a definite and sometimes a profound iron deficiency anemia. Although not uncommon, it is often overlooked. Recognition of the condition is easy. If one encounters a patient, usually in young adult or middle life, who has an iron deficiency anemia without apparent cause, this disorder should be considered. The diagnosis can often be made at a glance because the small telangiectatic lesions, often bright red in color, are almost always present on the lips and the palmar surfaces of the tips of the fingers.

From the standpoint of therapy, some of the abnormal types of bleeding due to increased capillary permeability are relatively unimportant. Often these manifestations are the least significant part of the clinical picture, as they are secondary to the more important primary disease toward which therapy must be directed. Usually with the control of the main disease from which the patient is suffering, the hemorrhagic disorder will frequently be curtailed.

Thrombopenic Purpura

When one observes a patient with purpura and bleeding from the mucous membranes, at once the question should be asked, is this condition due to a diminution in the blood platelets (thrombopenic purpura) or are the platelets in the circulating blood present in normal numbers (non-thrombopenic purpura)? If the number of platelets is diminished, then it should be determined if this has occurred secondarily to a recognizable cause, or if there is no apparent reason. On this basis all thrombopenic purpuras can be divided into the *secondary* and *idiopathic* types.

Changes in the Blood in Thrombopenic Purpura

Regardless of the type of purpura, there are certain characteristic changes in the blood which are common to both conditions. These are: (1) a diminution in the number of circulating platelets; (2) a prolongation of the bleeding time; (3) a normal coagulation time; and (4) the inability of the blood to form a normal retractile clot which will express serum. In addition, the tourniquet test is almost always positive.

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The blood platelets are reduced in all instances when active bleeding is present, to less than 100,000 per cubic millimeter, and usually much below this. In some such patients it is not even possible to find a single platelet in the circulating blood after prolonged search. In general the severity of the tendency to bleed is correlated with the extent of the reduction in the number of blood platelets, but this is not strictly true. For example, I have observed patients with almost a complete absence of blood platelets who have had only slight evidence of a bleeding tendency, whereas those with over 100,000 per cubic millimeter sometimes bleed profusely.

The bleeding time, which is characteristically between 3 and 4 minutes normally, is usually prolonged longer than 10 minutes and may in some instances be extended for hours. The coagulation time is almost always normal unless there is a striking prolongation in the bleeding time, when it too may be somewhat increased. It is characteristic, however, for the clot, when formed, to be soft, friable and non-retractile instead of normal.

Secondary Thrombopenic Purpura

It is important to differentiate between idiopathic and secondary thrombopenic purpura, largely because *splenectomy* is the treatment indicated in the idiopathic type, whereas it should *never be done in patients with the secondary variety.* This is because in some instances, depending on the primary cause of the condition, the patient will recover without this major operation and, in others, when it is secondary to a major disease such as leukemia, it would be valueless and hence the patient would be subjected to a procedure which could not possibly be helpful.

The main diagnostic point in recognizing secondary thrombopenic purpura is the discovery of some cause for it. It is usually secondary to one etiologic factor of four main groups, as follows: (1) certain blood diseases, as leukemia, pernicious anemia and aplastic anemia; (2) invasion of the bone marrow with metastases from primary growths as carcinoma of the stomach, the breast, or hypernephroma; (3) various types of infection including any of the acute infectious diseases of childhood, typhus fever, smallpox, and rarely infectious mononucleosis; or (4) allergy due to various articles of diet or drugs (organic arsenicals, Sedormid, gold, the sulfonamides, quinine, and possibly others).

When the patient is observed with unquestionable evidence of thrombopenic purpura each one of the causes in these four divisions should be carefully investigated. They must all be eliminated before the diagnosis of the idiopathic type is given consideration.

The treatment and prognosis of the secondary type, of course, depend on the primary cause of the condition. In leukemia and aplastic anemia, the outlook is the same when purpura is present as without it, with the exception that a bleeding tendency usually forecasts that a fatal termination is not far distant. This is true also when the disorder is associated with metastatic lesions to the bone marrow. In the presence of thrombopenic purpura due to pernicious anemia, to many infections or to allergy, the prognosis is favorable if the primary condition can be controlled. The treatment, naturally, is concerned mainly with the primary disease. There is only one worthwhile therapeutic measure which can be directed toward the control of the purpuric condition per se and this is repeated transfusions of fresh (not bank) blood. While this procedure is of some value, it often falls short of the anticipated hope of what it might accomplish.

Idiopathic Thrombopenic Purpura

Although this disorder does not occur commonly, it is important that every physician should be acquainted with its characteristics. This is because it is one of the few conditions in which splenectomy is effective, in a malady which otherwise might terminate fatally. It may be defined as a disease of unknown etiology, most commonly occurring in children and young adults, characterized by spontaneous bleeding from the mucous membranes and into various tissues, a diminution of circulating blood platelets, a prolongation of the bleeding time, a normal coagulation time, an inability of the blood to form a retractile clot, and a positive tourniquet test.

It is essentially a disease of younger persons, as almost 90 per cent of the cases develop within the first 24 years of life and in only 10 per cent does the condition appear initially after the age of 40 years. A diagnosis, therefore, of idiopathic thrombocytopenic purpura in a person who is over 40 years of age should be scrutinized carefully, for at that age the secondary variety occurs more commonly. The condition predominates in the female sex, in a proportion of either 2 to 1, or 4 to 3, the estimates varying. This sex distribution is unfortunate because the excessive tendency to bleed is more hazardous in the female than the male due to the resultant menorrhagia and metrorrhagia.

The etiology of idiopathic thrombocytopenic purpura is unknown. All agree that the immediate cause of the bleeding is in some obscure manner related to the reduction of the blood platelets, but there is no satisfactory explanation of just how this thrombopenia acts. Furthermore, the cause of the thrombopenia is not clear. The two main views concerning this are as follows: (1) that the platelets are destroyed in excessive numbers by the spleen, and (2) that in some way the spleen forms a hypothetical substance which effects a maturation arrest or a slowed development of the platelets from the megakaryocytes in the bone marrow. Regardless of which theory is favored, there is a general agreement that splenectomy in all instances exerts a beneficial and in most cases a curative effect on the condition.

The symptoms and signs are all related to the abnormal tendency to bleed. They consist of the appearance of purpuric spots in the skin and bleeding from the mucous membranes without preliminary symptoms. The abnormal tendency to bleed from the mucous membranes varies in severity from a slight oozing to hemorrhages so extensive as to cause a pronounced hypochromic anemia. The most frequent site is from the nose and mouth but it may also arise from the gastro-intestinal tract with hematemesis and tarry stools, the urinary tract with hematuria, from the uterus, or into the various organs of the body including the brain which may be the immediate cause of death. Profuse and prolonged uterine bleeding which gives rise to a serious hypochromic anemia may be the sole evidence of the disease for a considerable period of time. Gross splenomegaly is rarely present and should arouse the suspicion that the patient has a secondary type of thrombopenic purpura in association with some blood dyscrasia, such as leukemia. Occasionally the edge of the spleen may be palpable in patients with the idiopathic type.

The blood changes in patients with this disorder are characteristic. As previously stated, the bleeding time is prolonged, the clotting time is normal, but the clot does not retract, the platelets are reduced or in some instances are almost absent, and the tourniquet test is

positive. The only other change in the blood is the presence in some of the patients of a hypochromic microcytic anemia which is accounted for by the excessive loss of blood. The leukocyte count is within normal limits. In some instances, where there are widespread cutaneous hemorrhages, an eosinophilia varying from 4 to 40 per cent may be present.

The Treatment and Prognosis

The course of this disorder is unpredictable. The patient may have one attack and recover, never to experience such symptoms again, or there may be recurrences. The latter course is the one which occurs in about 75 per cent of all patients after the first episode of bleeding.

The two procedures which are most likely to be of therapeutic value are blood transfusions and splenectomy. Blood transfusions, in my opinion, are useful as they may tide the patient over until a spontaneous remission occurs. If splenectomy is not done, it is likely that the condition will become chronic and the patient suffer from varying degrees of incapacitation. The mortality from the operation is low, the possibility of complete control of the bleeding and restoration to health is great, and the likelihood of a recurrence in patients who do not have a splenectomy is considerable.

When the operation has failed, it has been discovered occasionally that this was due to the presence of accessory spleens which were not noted at the time of the operation. In my opinion, therefore, *in the presence of a well established diagnosis,* and after preliminary preparation with blood transfusions, all patients with this disease should have the spleen removed by a competent surgeon who should use great care in detecting and removing any accessory spleens which may be present.

Hemorrhagic States Due to Changes in the Normal Clotting Components of the Blood

To understand the tendency to bleed which arises from an abnormality of the components of the blood clotting system, it is essential to have a clear idea of the normal coagulation process. Although there are important gaps in our knowledge and some differences of opinion concerning the nature of this process, nevertheless, sufficient is known to construct a working hypothesis which is useful in understanding some of the hemorrhagic disorders which are encountered in clinical medicine. A majority of investigators favor the two stage blood coagulation theory first proposed by Morawitz in 1904. This may be stated as follows:

Stage 1.
Prothrombin + thromboplastin + calcium → thrombin
Stage 2.
Thrombin + fibrinogen → fibrin

In this theory there are four primary substances (prothrombin, thromboplastin, calcium and fibrinogen) which participate in the reaction. The other two (thrombin and fibrin) result from the interaction of the four. This theory considers that prothrombin unites with thromboplastin to form thrombin. Apparently this reaction can only occur in the presence of calcium. Thrombin, thus formed, unites with fibrinogen to form fibrin which is the basis of the blood clot.

Thromboplastin and Hemophilia

From the standpoint of clinical medicine, in the light of our present knowledge, there are only two of these substances which need be discussed, namely, thromboplastin and prothrombin. Thromboplastin is derived from the tissues and the blood platelets. By some it is thought to be an enzyme and is called thrombokinase. In any event, it is considered to be the "trigger mechanism" which initiates the clotting process. It is the opinion of William H. Howell and others that thromboplastin is supplied normally to the blood plasma by the disintegration of the blood platelets, and that the abnormality in patients with hemophilia is the delayed rate at which the platelets release the thromboplastin for the purpose of accelerating the clotting process. The diagnosis of hemophilia usually offers no difficulties. It is impossible to improve the terse definition of the disease by Osler that it is "the inherited tendency of males to bleed." In this condition the bleeding time is usually normal, but the coagulation time is increased, always over 10 minutes, and sometimes it is prolonged to 18 or 22 hours. The clot, when it forms, is normal.

It should be kept in mind that any child born with hemophilia is suffering from a most serious handicap because of two main reasons: (1) about three-fourths of the patients succumb before the age of 30 years, and (2) after the age of 20 years practically every patient with the disease is seriously crippled with joint deformities due to hemarthrosis.

The treatment of this disease is not entirely satisfactory. There is no better method of controlling the bleeding than the use of blood transfusions. Even with such a therapeutic agent, however, if the patient is in the state where the coagulation is delayed over 12 hours, it is difficult to curb completely the abnormal hemorrhage. Certainly patients and their families should be warned of its hereditary nature and the danger of transmitting the condition to the offspring of affected persons. It is only safe for the unaffected males to have children, as they will remain free from the disease. The condition is transmitted solely by females, but there is no method of determining if such a member of a family is a carrier of the condition and capable of transmitting it to her male offspring.

Despite the large amount of effort to isolate purified products from the blood serum and body tissues, there is no treatment superior to transfusion of whole blood or plasma for the temporary control of the disorder.

Vitamin K and Hypoprothrombinemia

The discovery by Henrick Dam in 1934 of vitamin K and its relationship to the coagulation of blood, along with the later investigations which proved its participation in the formation of prothrombin, constituted a major advance in our knowledge of blood clotting mechanism and of the hemorrhagic diseases. The important role of vitamin K in the etiology of hemorrhagic disease of the newborn, and the abnormal bleeding in association with jaundice entitles it to a detailed consideration.

In order to understand the most important points about the physiology of vitamin K, a brief review of our knowledge concerning its source, absorption, and relation to prothrombin is essential. Vitamin K is fat soluble naphthaquinone. It occurs abundantly in certain vegetables such as spinach, cauliflower, cabbage, kale and others. After being ingested in the diet, absorbed from the intestines, and transported to the liver, it is apparently converted to prothrombin and as such participates in the normal coagulation process. Any deficiency in the intake, absorption, or ability of the liver to convert vitamin K to prothrombin, causes a deficiency

in the circulating blood. This can be demonstrated by estimating the prothrombin time for which the method of Quick (*Am. J. Med. Sc.* 190:501, 1935) is the most practical. The clotting time by this method usually requires between 10 and 25 seconds. The test is done simultaneously on the blood of a normal person as well as on the unknown sample and the result expressed in per cent of normal. Abnormal bleeding does not occur until the prothrombin is reduced to 10 or 15 per cent of normal. The prothrombin estimation, while not difficult, should be performed by a laboratory worker who is accustomed to the various aspects of the technic. It is not ordinarily suitable to do such a test in isolated instances in a physician's office.

A hypoprothrombinemia may occur as the result of (1) failure to absorb vitamin K from the intestine; (2) liver disease when the vitamin apparently cannot be converted to prothrombin due to failure of hepatic function; (3) a deficient dietary intake; (4) unknown causes (the idiopathic type); and (5) dicumarol and heparin administration.

Hypoprothrombinemia Resulting From Failure of Absorption

This may arise from two mechanisms: the presence of (1) a common duct stone or a biliary fistula, or (2) impaired absorption from rapid passage through the intestines or from an abnormality of the bowel wall which interferes with its normal function. If bile does not reach the intestines in normal amounts, fat is not digested normally and vitamin K, being fat-soluble, is lost in the stools. This accounts for the hypoprothrombinemia in patients who are jaundiced as a result of the common duct obstruction, and the excessive bleeding which is associated with this condition.

The most effective method of treating such a condition is to administer the water-soluble forms of vitamin K intravenously, either as menadione bisulfite in doses of 1 to 3 milligrams daily, or Synkamin in doses of 2 to 5 milligrams daily. Patients with jaundice should never be operated upon until the bleeding time is within normal limits and the prothrombin level is at least 70 per cent of normal. Apparently there is no harm in giving excessive doses of vitamin K occasionally because in treating the dangerously low prothrombin level sometimes induced by the administration of dicumarol to patients with coronary thrombosis, as much as 72 milligrams of menadione bisulfite (U.S.P.) has been given at one dose without undesirable effects.

There may be a clinically significant hypoprothrombinemia in such conditions as sprue and chronic ulcerative colitis, or in patients in whom a short-circuiting operation has been done on the intestinal tract. In such patients vitamin K is not absorbed because of the rapid passage through the intestines or impaired absorption for unknown reasons, possibly associated with alterations in the intestinal walls.

Hemorrhagic Disease of the Newborn

This condition may be defined as a specific disease entity due to hypoprothrombinemia, which usually manifests itself clinically in the first week of life in the form of spontaneous hemorrhages. Although bleeding may be present in any tissue of the body, it is most commonly observed in the skin and subcutaneous tissues, the umbilical stump, and the intestines. The disorder is controlled promptly by means of vitamin K therapy. It should be kept in mind that not all hemorrhagic disorders occurring in the newborn are due to a hypoprothrombinemia. Consequently they should not all be considered as examples of hemorrhagic disease of the newborn. Bleeding in the first few days following delivery may be due to a number of other causes, as thrombopenic purpura, deficient fibrinogen, increased capillary permeability as a manifestation of allergic phenomena, infection, toxemia, and finally to a vascular accident incident to the birth process. In recent years it has been found that about one-half of the newborn have a low capillary resistance which might also be the basis for an increased tendency to bleed.

The present day view is to define hemorrhagic disease of the newborn as a condition due solely to a prothrombin deficiency. This occurs in less than 0.5 per cent of all infants within the first 10 days of life, and usually within the first week. The onset of the bleeding is with a slow oozing most frequently from the stump of the umbilical cord or in the skin which usually results in large ecchymotic areas. Internal bleeding most commonly arises in the intestines which causes bloody stools; or the bleeding may be from the stomach, the urinary tract or the vagina. Intracranial bleeding, which most frequently occurs within 4 to 5 days after birth, is the most serious aspect of the disease. It may lead to death, or to permanent injury of the nervous system.

The present view concerning the cause of this condition, which may be accepted tentatively, is as follows: The newborn infant who develops the disorder lacks a sufficient reserve of vitamin K to restore the prothrombin which is lost in the first few days of extrauterine life. Normally this depleted store is amply restored by the reserves with which the infant is supplied. The prophylactic treatment is, therefore, to administer vitamin K to the mother. This insures an adequate supply of vitamin K in the infant to provide for the first few days of life when these reserves are heavily drawn upon. To accomplish this, 2 milligrams of menadione orally should be given to the mother each day for two weeks before labor occurs. Or the infant may be given 2 milligrams of menadione in oil intramuscularly at birth, or a similar amount of the water soluble product, Synkamin.

The Relation of Liver Injury to Hypoprothrombinemia

There is clear cut evidence to indicate that the liver is responsible for the utilization of vitamin K in the synthesis of prothrombin. While the function of this organ may be damaged by many diseases, it is the injury associated with prolonged obstruction to the common duct, to atrophic cirrhosis, and in toxic hepatitis that is of the greatest importance from this standpoint. The relation of the liver to hypoprothrombinemia is of clinical significance for several reasons, as follows: (1) it may account for excessive bleeding in patients with liver disease; (2) it should be kept in mind that the only treatment of value is the transfusion of blood, (the administration of vitamin K under these circumstances has no effect because the defect is in the inability of the liver to convert vitamin K to prothrombin); (3) the failure of the inefficient liver to change vitamin K to prothrombin has been utilized as a functional test of promise. If, for example, a hypoprothrombinemia were present and there was no increase in the amount present following the intravenous injection of vitamin K, this would be acceptable evidence of considerable liver damage.

Hypoprothrombinemia Due to Dietary Defects

Vitamin K deficiency rarely occurs in animals even after it is completely eliminated from the diet for long periods of time. This may be because animals have a great reserve supply or because the bacteria of the intestinal tract may synthesize it. In man it is unlikely that there should be a deficiency of this vitamin because of its widespread distribution in the diet of individuals of this country. It must be concluded, therefore, that a significant decrease in the prothrombin of the circulating blood is unlikely to be caused by a dietary restriction. On the other hand, it is acknowledged that in pregnant women it is possible that a vitamin K deficiency occurs to such an extent that the fetus is deprived of its reserves. This is thought to account for the condition known as hemorrhagic disease of the newborn, previously discussed. Furthermore, in certain conditions such as pellagra, a deficient diet may produce a diarrhea which in turn is responsible for impaired absorption of vitamin K and a resultant hypoprothrombinemia.

Idiopathic Hypoprothrombinemia

In 1941 Rhoades and Fitz Hugh reported (*Am. J. Med. Sci.* 202:662, 1941) the case of a youth, age 18 years, in whom hypoprothrombinemia existed for no known cause. Although the patient had been regarded as having hemophilia for the past 10 years, there was no family history of this disorder and when Quick's method of doing the prothrombin time was introduced, it was found to vary between 70 and 90 seconds. Oral and parenteral vitamin K therapy was ineffective. Death resulted from a subdural hematoma and hemorrhage into the left basal ganglion. Although the cases of this condition which have been observed were in males, it is likely that eventually a similar condition in a female will be reported and incorrectly regarded as hemophilia. The only form of therapy which is even of transient value in idiopathic hypoprothrombinemia is repeated blood transfusions. It is possible that future trials of large doses of vitamin K may be helpful.

Heparin and Dicumarol

Heparin, first isolated from liver by William H. Howell in 1918, is an effective anticoagulant but it is of little value in clinical medicine. It is used in the treatment of thrombophlebitis and coronary thrombosis to diminish rapidly the coagulating property of the blood in the hope that emboli will not form or myocardial infarction will not progress. Its action is more rapid than dicumarol, as an effect is apparent in a few hours, whereas the maximum is not attained following dicumarol for a period of 18 to 30 hours. According to Howell, heparin prolongs coagulation by preventing prothrombin from interacting with the platelets and calcium to form thrombin.

Dicumarol, 3,3'-methylene-bis (4-hydroxycoumarin), first isolated from spoiled sweet clover, when given to man in doses of 300 milligrams daily will prolong the prothrombin and the coagulation time. Apparently it acts in some unknown manner by reducing the prothrombin content of the circulating blood. Although there has been some difference of opinion concerning this, it is now generally accepted that large doses of vitamin K in the form of menadione bisulfite (72 milligrams intravenously) will counteract the effect of dicumarol, but this is not apparent for 2 hours with a maximum effect in 18 to 30 hours. If an immediate neutralizing effect of this drug is desired it would be wise to administer the medication in the dosage stated and in addition give a blood transfusion which would supply prothrombin for immediate use.

The exact place of heparin and dicumarol in the prevention of post-operative emboli, and in the treatment of thrombophlebitis and myocardial infarction, is as yet undetermined. Further development and more experience may result in the acceptance of such methods of treatment as having sufficient value to warrant their more widespread use. *The intravenous use of either heparin or oral dicumarol should not be undertaken unless ample facilities are available for the daily determination of the prothrombin time.* An attempt should be made to keep the prothrombin level in the vicinity of 30 per cent of normal.

IV. BLOOD TRANSFUSIONS

It is not my intention to review the entire subject of blood transfusions, but only to mention some special points concerning them which should be of practical interest to practitioners. In the first place, it should be admitted that unless an unlimited, carefully tested supply of citrated blood is available to every patient when needed, the community is not offering to the public one of the most important and life saving therapeutic measures available to our profession. In order to fulfill such an obligation, it is essential that a well organized "blood bank" be established and that the willing cooperation of all physicians be secured in maintaining its blood supply by the solicitation of donors. The blood bank with its comprehensive program as established in Honolulu is one of the most progressive and efficient ones with which I am acquainted.

The Indications for Blood Transfusions

It is now recognized that blood transfusions are indicated in a wide variety of conditions, some of the more important being as follows:

1. In conditions associated with an *anemia in which there is no other effective treatment* available. Such anemias are present in association with cancer, leukemia, aplastic anemia, lymphoblastoma, and various other disorders. In such conditions it is recognized that the patient may survive for a considerable period. Transfusions are not administered, however, primarily with the idea of prolonging life, but in order to make the patient more comfortable. In these diseases I believe that the hemoglobin of the circulating blood should be maintained in the vicinity of 70 per cent, for at this level few, if any, symptoms of anemia are experienced. In chronic nephritis associated with an anemia, Cooley's anemia, and sickle cell anemia, it is possible not only to make the patient more comfortable but also to prolong life for a long period of time by repeated blood transfusions.

2. In *acute hemorrhage*. It has been demonstrated that whole blood is superior to blood plasma in the treatment of acute hemorrhage. This is because not only does it supply in toto what is lost but also it is of assistance in the restoration of the hemoglobin to a normal level. By utilizing the blood bank it is possible to provide an almost unlimited supply of blood to patients with hemorrhage. During the acute stage of bleeding an attempt should be made to maintain the systolic blood pressure at a minimum of 100 mm. of mercury by this means.

3. To *sustain life* until a diagnosis can be made and special therapy instituted. Often patients are admitted to the hospital in extremis suffering from a severe anemia of obscure nature. Under these circumstances, one or more blood transfusions should be given without delay to insure the immediate safety of the patient until the proper diagnostic procedures can be performed and the necessary treatment given. Also it should be kept in mind that a patient may succumb from an anemia, such as pernicious anemia, before sufficient time has elapsed to respond to potent anti-pernicious anemia medication. It is our custom, at the Simpson Memorial Institute, to determine the blood type and make all arrangements for an emergency blood transfusion in all such patients in whom the blood contains less than 1.5 million red blood cells per cubic millimeter, or who for any other reason appear to be in imminent danger.

4. In the *treatment of shock with associated hemorrhage*, it is desirable in all instances to restore the blood volume to normal with whole blood at the earliest possible moment. It should be kept in mind that in severe shock the blood volume may be reduced to 66 per cent of normal or less. If the blood volume is 6 liters, this would mean that it is diminished 2 liters, and hence an equivalent amount of blood should be given if the optimum treatment is carried out. Too often in the past an inadequate amount has been injected. The treatment of shock in which there has been *no* loss of blood, is with *plasma*. In such cases there is a loss of fluid from the vascular system, and a resultant concentration of the hemoglobin and red blood cells, with a reduction in the blood volume. In such a condition there has been no loss of hemoglobin and red blood cells from the vascular system.

5. As a means of *expediting the return of the blood to normal* in a patient with anemia. Consideration should be given to this indication more frequently. If a patient loses a sufficient quantity of blood, from such a condition as a bleeding peptic ulcer, to cause a reduction in the hemoglobin of 50 per cent, and it is known that the bleeding is controlled, the hemoglobin will regenerate at the rate of approximately 1 per cent a day. Hence a period of about 30 days would be required to reach normal. Experience has shown that a blood transfusion of 500 cc. in an adult of average size will increase the hemoglobin about 10 per cent. If three such transfusions were given in the course of a few days to a week, the blood of the patient would be restored promptly to normal. Some have argued that the use of blood transfusions under these circumstances will deprive the bone marrow of a powerful stimulus to hematopoiesis, but it is my belief that even if the blood is brought to normal promptly, a sufficient stimulus will remain to maintain it there.

6. The use of blood transfusions as a *pre-operative measure*. Unless an anemic patient has a condition demanding an immediate emergency operation, I do not see why even minor surgical procedures should be performed in the presence of an anemia. No reasons need be recounted for this other than to say that every surgical operation entails some risk and if an anemia is present it is increased. By means of blood transfusion, the hazard is lessened and, furthermore, convalescence is shortened.

7. *Prior to extensive roentgen ray exposures*. It is not emphasized sufficiently that the roentgen ray when used therapeutically in such conditions as leukemia and the lymphoblastomas not only exerts a beneficial effect, but also often depresses temporarily the red blood cell count in the peripheral blood. This effect is not commonly observed because it does not reach its maximum until a period of about 6 weeks after the exposures. The point in emphasizing this is to recommend that all patients who are to receive extensive roentgen ray therapy, and in whom there is an anemia, should have a sufficient number of blood transfusions, prior to roentgen therapy, to raise the hemoglobin to approximately normal.

8. The use of blood transfusions in *infections with anemia*. In my opinion, if a patient has a serious infection and an anemia, repeated blood transfusions should most certainly be given until the blood is restored to normal. In the presence of a normal hemoglobin and red blood cell count, the evidence is not sufficiently convincing to me to recommend this form of therapy. There is some evidence, however, that certain specific and non-specific antibacterial and antitoxic substances may be transferred by transfusions of fresh blood or plasma and hence from a theoretical standpoint they should be of value in the treatment of infections and infectious disease. Convalescent serums have been of assistance in controlling such infections as scarlet fever, measles, mumps and those due to the pneumococcus. It has not been established that the injection of leukocytes contained in transfused blood is of value in combatting infections, but the possibility that they may function in this respect cannot be dismissed completely. Although it is known that the immune globulin is quite stable, it is also recognized that complement, leukocytes, and possibly other important antibacterial substances rapidly degenerate in stored or "bank" blood.

The Control of Bleeding in Patients with Hemophilia, Thrombopenic Purpura, and Hypoprothrombinemia

The clotting defect in patients with *hemophilia* is due to a deficiency of thromboplastin which is derived from the blood platelets and tissue juices. Bleeding in patients with this disease is controlled by the injection of citrated blood or plasma. All of us have experienced considerable difficulty in managing the excessive bleeding in such patients following the extraction of teeth or with other minor surgical procedures, even when repeated blood transfusions are given for this purpose. In such patients this usually occurs when they have an unduly long coagulation time, in some instances over 12 to 18 hours. If such elective procedures are done when there is a spontaneous shortening of the coagulation time, the condition will be much easier to control.

Patients who are suffering from excessive hemorrhages in association with *thrombopenic purpura*, either of the idiopathic or secondary types, should be treated with repeated blood transfusions. Fresh, not bank blood should be employed because the blood platelets agglutinate within a few hours after removal from the body and hence are probably functionally inefficient. In patients with this condition who have a pronounced deficiency of the blood platelets, it is not always possible to control the bleeding by multiple blood transfusions even when these are administered repeatedly at short intervals. It is the *only* form of therapy, however, which is of value under these circumstances and hence should be used freely.

Blood transfusions are of value also in furnishing prothrombin to patients who are bleeding as a result of *hypoprothrombinemia*. This is especially true when the condition results from liver impairment, in which vitamin K therapy is ineffective. In such patients, the

only available source of prothrombin is that which can be injected in the transfused blood.

The Use of Blood Transfusions in the Treatment of Hypoproteinemia

A reduction in the blood proteins and especially the albumin fraction may result from a low protein intake; an excessive loss of albumin following repeated abdominal paracenteses, as in cirrhosis of the liver; in chronic ulcerative colitis; in renal disease as the result of a pronounced albuminuria; in the failure of albumin synthesis in widespread liver disease; in excessive utilization of albumin in any prolonged febrile illness; and in repeated and extensive hemorrhages. When a low plasma protein is present, often the patient has edema resulting from altered osmotic pressure relations. Blood transfusions in the absence of an anemia are not advisable in the restoration of the plasma proteins but it is possible to utilize intravenous injections of either plasma or plasma proteins for this purpose. In my experience, however, such replacement therapy has not been satisfactory. This may be for two reasons: (1) There is difficulty in restoring plasma albumin to a normal concentration in the circulating blood; (2) If plasma or concentrated albumin solutions are employed, a large amount of sodium chloride is also injected and the sodium ion is active in the retention of water. This augments rather than controls the edema.

Untoward Reactions From Blood Transfusions

In the thirty-three years that citrated blood has been used for transfusions, it has been clearly established that unmodified blood or complicated apparatus for the direct transfusion of blood is unnecessary.* Furthermore, with the proper typing, including the determination of the Rh groups, it is now possible to give transfusions with the maximum of safety. Following a certain small percentage of blood transfusions, however, there are various types of untoward reactions which may occur despite all reasonable precautions. In the average hospital employing bank blood such reactions are present following about 4.5 per cent of all blood transfusions. The nature of these may be classified as follows:

I. Those due to hemolysis of blood.
 - (a) The accidental use of incompatible main groups (O, A, B, AB).
 - (b) The transfusion of blood with incompatible subgroups.
 - (c) The Rh factor.
 - (d) The use of group "O" as a universal donor.
 - (e) The use of blood which has been stored too long (over 7 days).
 - (f) The transfusion of blood in patients with hemolytic anemia.

II. Reactions due to non-specific factors.
 - (a) Toxicity of the citrate.
 - (b) Unclean apparatus or contaminated solutions.
 - (c) Allergic manifestations.
 - (d) Speed reactions.
 - (e) Embolic phenomena.

* Doctors who recall "sweating out" transfusions for the Department of Surgery in Ann Arbor during the 1930's by the Vinson Tube method will be relieved to read this positive statement.—Ed.

If one includes all types of minor reactions, even asymptomatic febrile rises to over 99.6 degrees (F), the total number does not exceed 4.5 per cent in a well-conducted transfusion service. When the proportion of reactions is greater than this figure, the procedure as carried out should be subjected to a careful scrutiny to determine the responsible cause. In most instances the undesirable symptoms arise because the blood is given too rapidly (it should not be injected ordinarily at a greater speed than 500 cc. per hour); on account of improperly prepared distilled water; or other causes which produce reactions of a non-specific type.

Of much more importance is the occurrence of the hemolytic reactions which not only render the blood transfusion valueless because a certain per cent of all of the injected blood is destroyed, but because such an episode may terminate fatally. In fact, if 500 cc. of blood is hemolyzed in the body, there is a 50 per cent risk of a fatal termination. Fortunately hemolytic reactions are uncommon and it is always possible to avoid them if the proper precautions are taken. A few of the causes of such a reaction may be dismissed with a brief comment. As long as human beings err, there will be an occasional tragic confusion of the blood groups. When it is recognized that this has occurred, the only helpful procedure is to *alkalinize* the patient immediately. This may be accomplished by the *intravenous injection of from* 100 *to* 200 *cc. of a* 2.5 *to* 3.0 *per cent solution of sodium citrate.* This will render the urine alkaline within 15 minutes and afford some protection to the kidney, in the hope that uremia may be avoided. The same results may be attained by giving 500 cc. of a one-sixth molar solution of sodium lactate, or a similar amount of a 4 to 5 per cent solution of sodium bicarbonate intravenously. After the injection of the intravenous solution, the urine should be maintained in the alkaline condition by the oral administration of 4.0 grams (1 teaspoonful) of sodium bicarbonate 4 times daily.

A universal donor of the "O" group is often used in patients of the other groups, but the percentage of reactions when this type of donor is used is slightly higher than when type-specific donors are utilized. There should be just one word of caution about the use of a universal donor. It should be remembered that when the blood from such a donor is used, the injected serum agglutinates all the corpuscles of the recipients of groups A, B, and AB. As the blood is usually administered slowly, and the agglutinin titer of the universal donor is ordinarily not high, sufficient dilution by the plasma of the recipient usually occurs and hemolysis does not result. In rare instances, however, the titer of the universal donor is of sufficient strength (greater than 1:32) that it has resulted in significant hemolysis of the recipient's red blood cells and caused a serious reaction. The point to bear in mind is that *a type "O" blood may be used provided the titer of the agglutinin in it for the red corpuscles of groups A, B, and AB is not greater than* 1:32.

There is always some risk in giving a blood transfusion to a patient with hemolytic anemia, regardless of how perfectly the cross-matching between the recipient's serum and the donor's red blood cells may have been. In such patients, or in any situation where there is the slightest doubt concerning the compatibility of the blood, the following procedure should be carried out. About 50 cc. of blood should be given slowly and the trans-

fusion then stopped for a period of one hour. If no untoward symptoms have arisen at the end of that time, it is safe to proceed cautiously with the injection of the remainder of the blood.

The Rh Factor

Of great importance is the Rh factor, both as an explanation of avoidable hemolytic blood transfusion reactions and as a basis for the hemolytic anemia of newborn infants or erythroblastosis fetalis. In general, the practitioner of medicine should know that about 85 per cent of the white race are Rh positive and the remainder Rh negative. It is the latter who experience the difficulties with blood transfusion reactions, and the women of this group who give birth to infants with erythroblastosis fetalis.

It should be impressed on all physicians that every patient who receives a blood transfusion should have an Rh determination. *If the patient is Rh negative then Rh negative blood should invariably be given.* If it is not, in the case of a male, the Rh positive blood may act as an antigen and stimulate the formation of agglutinins which will hemolyze Rh positive red blood cells (anti-Rh agglutinins), after one or more additional blood transfusions are given. In the female, in the reproductive age, who is Rh negative, there are two hazards to contend with. The one is the development of agglutinins against Rh positive red blood cells following blood transfusions with Rh positive blood, just as it occurs in the male. An additional risk is concerned with pregnancy. If an Rh positive male mates with an Rh negative female, the possibility that the fetus in utero will be Rh positive must be considered. If this occurs, the mother may be stimulated to form anti-Rh agglutinins which will hemolyze the Rh positive red blood corpuscles of the fetus. These agglutinins during the first pregnancy usually do not attain a titer which causes hemolysis of the fetal Rh positive red blood cells. In subsequent pregnancies, however, this may occur and erythroblastosis fetalis with premature birth, or death of the fetus shortly after birth, may occur. If previous to the pregnancy such an Rh negative woman had been transfused with Rh positive blood one or more times, *agglutinins already would be present in her blood.* When pregnancy occurs under the circumstances outlined above, then the agglutinins would reach a much higher titer and even the first child might be born with erythroblastosis fetalis. An additional risk is that such a mother, having anti-Rh agglutinins in her blood stream, would hemolyze the Rh positive red blood cells if they were given as a blood transfusion.

The lesson to be impressed upon all physicians is *to give only Rh negative blood to recipients who are Rh negative.* In some instances it is necessary to employ a low titer "O" or universal donor who is Rh negative in order to accomplish this. The Rh negative female who marries an Rh positive male is faced with some hazard concerning childbirth and the risk of hemolytic reactions if blood transfusions are given. It is not, however, as great as some have thought. Estimates vary, but it seems fair to state that about 13 per cent of all marriages in the white race unite an Rh positive male with an Rh negative female. In no instance, unless the female has been transfused previously with Rh positive blood, will the first pregnancy result in a child who develops erythroblastosis fetalis. In subsequent pregnancies, however, the chance of the child being so affected is about 1 in 22. Once a female has given birth to a child with the disorder, it is likely that all subsequent pregnancies will be complicated in a similar manner.

REMINISCENCES OF DECEMBER SEVENTH: I

DR. ARTHUR GORDON HODGINS† was interviewed at his office, Miller and Hotel Streets, Honolulu, on Sunday, January 31, 1943.

Dr. Hodgins was born in 1876, graduated from the University of Toronto in 1896, was licensed in Hawaii in 1899, and has been in the practice of Obstetrics and Gynecology in this city since that time.

On the morning of December 7, 1941, he and his wife and his servants were at their place on "The Peninsula" located next to the Pan American Air Base on the middle loch of Pearl Harbor. They had finished breakfast and he was waiting to bring his servants into town for the week-end when he heard the first bomb drop on Pearl Harbor. He rushed out and saw the dropping of the bombs and the anti-aircraft fire and the smoke beginning to rise from the other side of Ford Island about one mile away. About 8:15 to 8:30 they were ordered to get out, and he left with his servants for Honolulu. Near Aiea he picked up a sailor who told him that the city was under attack and that three of our ships were down and burning. He came to his office and unsuccessfully tried to call his wife, and then proceeded to the Mabel Smyth Memorial Building for the lecture of Dr. Moorhead.* He arrived there shortly before 9:00 o'clock, and found several others of the medical profession there, including two army medical officers from Schofield. (See the description by Sam Brown.) He described what he had heard and seen, and the army officers said they had just come by that way and there was nothing to it, and they went on into the meeting. Two other army officers from Schofield came in and were immediately contacted by telephone and ordered to return to their quarters. Dr. Hodgins went into the hall and informed the first two medical officers from Schofield of the orders, but they paid no attention to him and sat still.

About five minutes after Dr. Moorhead began his lecture, Dr. Jesse Smith came in and announced that twelve operating surgeons were wanted at once at Tripler General Hospital. Dr. Sam Brown of Hilo, having no transportation, asked Dr. Hodgins to take him to Tripler. They had considerable trouble getting through, because everyone was taking to the road to see what was going on at Pearl Harbor. The first five surgeons to arrive at Tripler were Drs. Strode, R. O. Brown, Sam Brown, Moorhead and Hodgins. They reached Tripler about 9:30 and were met by Major Spitler, who said, "They caught us with our pants down." Subsequently Drs. Halford, Batten, Osorio, Black and others arrived. Dr. Hodgins and Dr. R. O. Brown were directed to the Maternity floor by some Major. Dr. Halford and some of the others did most of the major surgery. When they went to get ready for surgery and had their clothes off, there were no operating suits, and he worked most of the day in his B.V.D.'s. Later in the day someone found some pajamas for them to wear. They wore the same gown nearly all day and simply washed off their gloves between cases except when they got an occasional change of gloves. There was very little equipment. They had about three sterile towels for each patient, and their instruments were extremely limited. They each had two or three hemostats, and there was perhaps one operating saw in the house. There was plenty of sulfa drugs on hand but they had a great deal of trouble getting anesthetists, there being only two or three at the hospital, and consequently they did most of their surgery under local anesthesia. They were short of suture material and dressings. The Maternity department was very ill equipped to do the major surgery, so that they did not handle anything except shrapnel wounds and amputations.

They did not see Col. King the entire day.

He stated that the Army medical officers were acting as traffic officers, directing the ambulance drivers where to take patients, but that they made no apparent attempt to act as a triage to separate the urgent surgery from that less urgent. He said that no army surgeon did any surgery the first day.

Their first case was an amputation of a leg and the repair of a urethra torn by shrapnel. Dr. Brown, a urologist, desired to use a sound to make this repair, but they were unable to find one. Dr. Halford finally found a silver catheter but they were unable to use it, and Dr. Brown decided to drain the bladder supra-pubically. The patient was a fat man and they had only a single retractor to hold the wound open, and Hodgins had to use his finger to supply the deficiency. A catheter was fastened in place and that night the patient was brought back to be catheterized, but Dr. Hodgins didn't know why.

On one occasion, apparently when the instru-

This is the first of a series of reminiscences of December 7, 1941, collected by the War Recognition Committee of the Hawaii Territorial Medical Association, Dr. Steele Stewart, Chairman.

† Deceased.

* Dr. John Moorhead of New York City had been invited to give a series of post-graduate lectures on traumatic surgery.

ments had been reduced or changed, a man with a crushed arm was brought in which required amputation, and they had to refuse to do the amputation because of lack of instruments. "They were totally unprepared for any emergency such as that; Queen's would have been better prepared."

He stated that every operation was done by the civilian surgeons, and they cleared up most of the heavy work the first day, although there was some delay in getting to some of the patients of perhaps three to four hours. The blood and plasma was supplied by the local blood bank, and Dr. Fennel remained at the hospital giving the blood and plasma as rapidly as he could.

When Black got there he had to go back and get his own instruments.

The next day he returned to the hospital and offered his services and left his name and address for call, but was not called again.

They continued to work until about 4:00 p.m. He returned to the peninsula to find that his wife had packed up but the guard had refused her permission to leave. He talked the guard into letting them go to their sons in Dowsett Highlands, where they arrived at dark.

He advised that I see Mr. Al Castle, head of the Red Cross, about the work that they had done for about a year before the "blitz," and that Col. King had done everything he could to discourage their work as being entirely unnecessary. He stated further that he thought Col. King had done more against the civilian hospitals in the city than any other individual; e.g. Queen's Hospital was overcrowded and he would not allow them to put up a temporary structure to house about fifty patients because the hospital was in a danger zone. He demanded that "Queen's Hospital keep thirty beds vacant at all times for an emergency." Again Leahi Home for Tuberculosis was overcrowded and had a waiting list, but was well equipped and staffed, but Col. King insisted on building another hospital at Wahiawa and manned by men who had not taken care of tuberculosis, instead of adding to Leahi. Asked if he thought there had been any marked increase in tuberculosis, he said No. He felt that the chlorination of the water was entirely unnecessary, as the water supply came from artesian wells and had never given any trouble.

When asked who were the men who deserved the credit for the medical civilian preparation, he said the Committee* of Judd, Strode and others.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

A. G. Hodgins, M.D.

* The Medical Preparedness Committee of the Honolulu County Medical Society.

CASE REPORTS

Traumatic Avulsion of Arm and Shoulder Girdle

CLYDE L. PHILLIPS, M.D.
Hilo, Hawaii

A well built Hawaiian male, 38 years of age and weighing over 200 pounds, an employee of a contracting company, was working in a rock quarry in the capacity of a foreman or overseer for the rock crusher, when he was injured.

The following history was taken from the patient the morning after the accident. He stated:

"I noticed that the conveyor belt on the rock crusher was slipping and that the rocks were not moving up the conveyor as they should. I stood up and reached in to the conveyor to attempt to adjust the slipping belt. I was caught by the conveyor and pulled toward the crushers. I realized that I was in a dangerous place and when I felt my arm being pulled, I threw myself over the edge of the conveyor and dropped to the ground. I noticed that I had been injured severely but did not realize how serious the accident was. I ran immediately around and turned off the power supply to the crusher and then said to the boys, 'Come on boys, let's go to the hospital.' I, then, was brought to the hospital in an automobile and walked into the emergency room. Following that, I remember very little until I woke up in my bed in the hospital ward."



Fig. 1.—Appearance of wound twenty-one days after injury.

When the patient was first seen, he was on the gurney on his way to surgery. He was conscious but was pale and was showing marked signs of shock. He was perspiring profusely. He had been covered with blankets and external heat applied.

The first thing that was noticeable was the complete absence of the left arm and shoulder. The nurses had already prepared the surgery and plasma was waiting which was started into the veins of his right arm. The laboratory technician immediately typed the patient for transfusion and when she discovered that he was an O donor, she immediately volunteered to give blood since she was of the same type. This was, in itself, a life saving procedure since it would have been some hours before another donor could have been obtained.

An inspection of the wound was then made on the operating table. It was discovered that the complete left arm, including the entire shoulder and scapula and most of the muscles attached to the scapula, were missing, having been completely severed at their insertion. As the wound was explored farther, a small portion of the scapula was found; this was very jagged and sharp, and for this reason it was removed. The median nerve was lying in the wound and was about 8 inches long, the rest of it having been torn off. The nerve was then clamped and 95 per cent alcohol injected into it. A quick search was made for the other nerves but none were found, apparently having been torn off very high up.

The blood vessels were also stripped and were thrombosed, and there was very little bleeding, although there was evidence of previous hemorrhage. The blood vessels were immediately ligated and dropped back into the wound. No attempt at repair of the wound was made because of the patient's condition. Vaseline gauge packing was placed in the cavity and one or two sutures placed to bring the skin over the wound.

The patient was given a blood transfusion during this procedure and was returned to his room as soon as it was finished.

The patient responded very shortly thereafter and seemed in excellent condition. The shock had disappeared, the pulse and blood pressure were well within normal limits, and his spirits were excellent. His first words were, "This goes to prove that you can't kill a Kanaka."

Penicillin therapy was then started to combat any infection. About two hours later, the attendants at the quarry brought in the missing arm, at which time an opportunity was given to see just what had happened at the time of the accident. The fact that most of the muscles of the shoulder girdle had been torn out was proven by examination of the shoulder and arm. There

was no mangling and the tissues were easy to identify.

Forty-eight hours after the wound was packed and after the accident, the patient was returned to surgery and the vaseline packing was removed. There was no further hemorrhage; the wound was remarkably clean and an attempt was made to close all of the dead space and to close the skin over the wound, leaving two rubber tissue drains in the area. Sulfa crystals were dusted into the wound on both occasions. The wound was then closed and the patient again returned to bed.

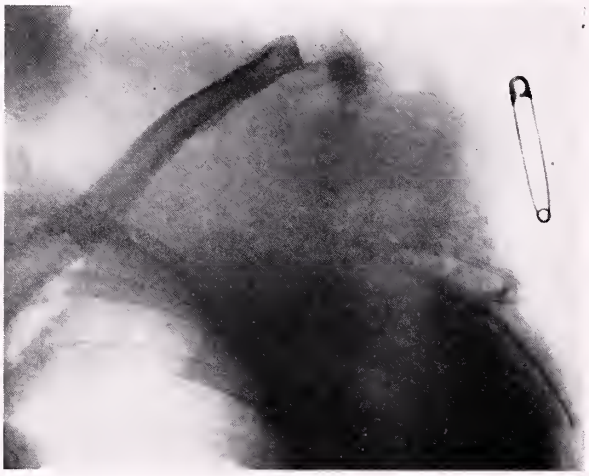


Fig. 2.—X-ray appearance of shoulder twenty-one days after injury.

Toward the end of the third day, the patient's temperature was normal. He was complaining only of pain in the amputated hand and particularly in the distribution of the ulnar and radial nerve. The alcohol injection of the median stump had, apparently, blocked the impulses from that area. Patient stated that he, at one time, had a compound fracture in the forearm and that he had had pain from time to time in that area. He now stated that he was having more pain in the region of that compound fracture.

For the next ten days, the wound drained clear serum. The sutured area remained clean and there never was at any time any pus seen in the wound. After ten days, the patient was walking around the hospital and in excellent spirits and feeling fine excepting for the recurrence of referred pain in the amputated arm at night. At the end of three weeks, the patient was discharged from the hospital with the wound practically dry. Never at any time was there any sign of infection.

The photographs and the X-ray pictures will show that the clavicle was the one remaining bone in the area. Pictures were taken twenty-one days after accident.

I do not recall ever having heard of an accident which caused so much destruction with so little general effect on the patient, and this is what has made the case so interesting.

COUNTY SOCIETY REPORTS

MAUI COUNTY MEDICAL SOCIETY

A dinner meeting of the Maui County Medical Society was held at the Wailuku Hotel, June 10, 1947. Those present were Dr. Anderson, presiding; Drs. Frank St. Sure Jr., Rothrock, Tofukuji, Cole, Rockett, Dusendschon, Shimokawa, Ed Kushi, Harold Kushi, Underwood, Kanda, Dunn, Uhde, Beland, Haywood and Alford.

A letter from Mr. Robert W. Millar, administrator of Veterans division HMSA was read, stating that the Veterans Administration cannot authorize any treatments to be rendered by doctors who are not members of the local County Society. The few doctors who fall into this category asked the society to work expeditiously as possible to get them into membership.

Dr. L. S. Rockett was unanimously accepted as a regular member of the society.

It was moved by Dr. Rothrock, seconded by Dr. Dunn, and unanimously agreed, that a letter be sent to Mrs. James R. Judd of Honolulu expressing our sympathy upon the recent death of Dr. Judd.

The following committees were appointed by the president:

First Aid Committee for County Fair—Chairman, Dr. William Patterson. Chairman will appoint the hours of individual physician coverage at the Fair, and all members of the Medical Society are requested to help as much as possible.

First Aid Committee for July 4th Celebrations at Fairgrounds—Chairman, Dr. James Fleming.

Medical Economics and Public Relations Council—to be made up of six doctors headed by the President, to be empowered to pass on vital issues in which not sufficient time is permitted for a medical meeting. They are: Drs. Ed Kushi, K. Izumi, St. Sure, Shimokawa, Underwood, Tompkins.

News Committee for publicizing Medical Society facts pertinent to betterment of Society relationship to public —Chairman, Dr. T. W. Kanda.

Annual Picnic or Party Committee—Chairman, Dr. Ed Kushi; Co-chairman, Dr. J. Sanders.

The official report on special assessments was made.

In the future it is planned to have hospital meetings. The July meeting will be held at the Paia Hospital. It will be a dinner meeting and there will be a medical presentation of interesting cases by members of this hospital staff.

T. W. KANDA, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital on April 9, 1947. Members present were Drs. Wade, Liu, Cockett, Boyden, Fujii, Toney, Wallis, Depp, Brennecke and Masunaga.

Communication from Dr. Hewell was read, and it was designated that the Territorial Medical Association has appointed Dr. Samuel R. Wallis and Dr. William Toney to serve on both the Maternal and Child Health and the Crippled Children Advisory Committees.

Due to some complaints by physicians on manner of handling two specific cases by the KMSA, it was decided that these cases be presented to the HMSA with a request for some definite policy.

Motion was made and passed that secretary write letters to our Kauai legislature expressing our opposition to the legislative bill pertaining to compulsory health insurance.

Annual election of officers took place and the results were:

President.....Dr. Depp
Vice President.....Dr. Toney
Secretary-Treasurer.....Dr. Cockett
Censors:
Dr. Wallis.....to serve 2 years
Dr. Wade.....to serve 3 years
Dr. Chisholm....to complete his final year
Delegate.....Dr. Boyden
Alternate Delegate.....Dr. Brennecke

Meeting adjourned at 8:30 p.m.

EICHI MASUNAGA, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

Meeting: July 30, 1947

Present: Dr. Hill, presiding; 80 members present.

Announcements: Drs. Janet M. Boog and Gilbert Freeman were welcomed as new members into the society. The membership agreed to waive the '47 assessments of Dr. Tomita, because he has just returned from service in the armed forces and is beginning his private practice; Dr. Taylor, because of financial stringency; and Dr. Meller Biddle, because she has given up her position with the Territorial Hospital, Kaneohe, and will soon leave her part-time private practice.

Dr. Hill brought before the house for approval a recommendation of the Board of Governors, that a series of lectures be given to familiarize the new doctors with the objects of the society.

Action: A motion by Dr. G. Milnor, that the matter be set aside for study and consideration, was carried by a majority vote.

The membership approved the proposal that the Department of Public Welfare payments to the society for the care of indigent sick terminate as of July 31.

Mr. Carl Flath, superintendent of Queen's Hospital, outlined plans for a school for practical nurses, and asked the society's endorsement of such plans. He explained that it was essential to train home nurses and particularly orderlies under the new Nurses' Practice Act. The school will be conducted by the Department of Public Instruction.

Action: On motion by Dr. Arnold Jr., duly seconded, the membership agreed to endorse plans for the school for practical nurses.

Dr. F. D. Nance introduced a resolution:

WHEREAS: The present accepted masculine dress of tight collar, tie and coat during the summer months is an anachronism dictated solely by tradition, and

WHEREAS: The wearing of an aloha shirt without coat represents a comfortable, sensible and typically Hawaiian form of summer attire,

BE IT RESOLVED: That the Honolulu County Medical Society heartily endorses the use of such sensible dress by its members during working hours.

Action: The resolution, duly seconded, was passed by a large majority.

Dr. Majoska recommended that a law be made to give the City and County coroner jurisdiction to investigate unattended deaths. He explained that to date no such authority has been given to the coroner.

Program: Dr. Hill introduced Dr. Howard Brodie Stephens of the University of California Medical School, who spoke on "Congenital Anomalies of the Heart and Great Vessels." Dr. Stephens gave a very interesting lecture with illustrative slides.

S. L. Yee, M.D.
Recording Secretary

BOOK REVIEWS

Diseases of Metabolism. By Garfield G. Duncan, M.D. 1045 pp. Price $12.00. W. B. Saunders Co., Philadelphia and London. 1947.

The book includes contributions from twenty-one high ranking doctors in the field of nutrition.

Metabolism is defined as "the sum total of tissue activity as considered in terms of physico-chemical changes associated with and regulated by the availability, utilization and disposal of proteins, fats, carbohydrates, vitamins, minerals and water, and the influences which the endocrines affect in these processes." To explain and prove this, follow 1045 pages of concentrated material, fascinatingly presented and fully documented. With each chapter is incorporated some of the history of the brilliant pages that made up the development of this young but vigorous science. For instance, in basal metabolism, the names of Lavoisier, Carl Voit, Rubner, Lusk and DuBois are a series of bright lights on the metabolic way from the dark days of the French revolution to the bright progress of recent years in the United States.

The fuller knowledge of nutrition now involves not only calories, carbohydrates, fat, protein and minerals, but the vitamins, the role of the hormones, the electrolytes, the interrelation of minerals, water and buffer substances and the different influences that may vary their actions. The whole new field of amino acids has completely changed our concept of protein metabolism. It is not the quantity any longer but the quality of proteins that counts.

Recently by the use of isotopes, many of the body chemicals can now be traced through the body and through the different organs. The isotopes act like a tag on any chemical to be studied. Thus many substances can be followed throughout their course and to their destination. Innumerable doors to further research have been opened by this method.

The relation of the endocrine glands to metabolism is becoming more and more important. Epinephrine is "a hormone that enables considerable quantities of glucose to be rapidly liberated into the blood stream under conditions of violent effort or emotion and . . . is considered as a regulator of carbohydrate metabolism. Cortical function is probably related to some metabolic process which links both the alteration in carbohydrate and electrolyte metabolism. It may also affect protein metabolism."

"The active crystalline steroids, isolated from the adrenal cortex, are involved in this mechanism." . . . "These are 11 Dehydrocorticosterone, corticosterone, 11 dehydro—17 hydroxy-corticosterone and 11 hydroxy—17 hydroxy-corticosterone. This is the order of their activity." This gives some idea of the complexity of present day thinking in this field.

The next paragraph contains the staement, "Thyroxin . . . produces . . . increased tissue protein catabolism, an accelerated utilization of fats and a reduction in the liver glycogen." But the "central brains" of this hormone control is apparently the anterior pituitary, i.e., "the anterior pituitary has a widespread influence on carbohydrate metabolism both by its trophic effect on thyroid and adrenal cortex and also by some principle that apparently acts directly on the tissues."

The body is pictured as a dynamic mechanism in which the protein of the body is constantly being torn down and resynthesized. Cholesterol is constantly being destroyed and remade, and the fat in the diet has no effect on this cholesterol mechanism. Red cells with a life span of 45 to 100 days are pictured as active workers loading, carrying and unloading oxygen and are said to be formed at a rate of a trillion a day. It is stated that even adult teeth can no longer be considered metabolically inert.

The kidney is pictured as an extremely active laboratory in which in the course of each day, liters of fluid containing salt are poured into the alimentary canal, only to be withdrawn to their source again. Under normal conditions 99 per cent or more of the water and sodium salt filtered through the glomerulae are absorbed by the tubules.

In this active mechanism the vitamins are described as "organic food substances which in however small quantities are necessary for maintaining proper growth and continued health . . . some are involved (as catalysts probably) in systems governing oxidation of carbohydrates, proteins and fats . . . the judicious use of them is revolutionizing medicine." The diseases produced by disturbances of these various mechanisms are avitaminoses, undernutrition, obesity, xanthomatoses and glycogen disease, gout, hyperinsulinism, diabetes insipidus, melituria, diabetes mellitus, disorders of the thyroid gland, disease of the kidney and also some aspects of disorders of the blood. Diagnostic methods and treatment are given, as well as a final table of the composition of food.

However, the story of how these substances have been analyzed in health and disease is so complicated, I would recommend a careful study of this book for anyone who wishes to be up-to-date in this vital science. The book suggests a need for a complete revolution in our thinking of the accepted metabolic knowledge of ten to twenty years ago.

NILS P. LARSEN, M.D.

Personal Health and Human Relations. By Lillian L. Biester, William Griffiths, and N. O. Pearce, M.D. 264 pp. Price $3.50. The University of Minnesota Press, Minneapolis, Minnesota. 1947.

The formidable title of this volume was evidently adopted by the authors, who are all associated with the Educational Services of the Minnesota State Department of Health, in an attempt to avoid the stigma which may be attached to such terms as "Sex Education." This is in conformity with the policy which they recommend of avoiding attempts to arouse public interest in this subject, but rather to include it in the school curriculum with a minimum of fanfare. The book includes teaching

materials and methods designed to enable teachers to give their students correct information about sex and family life in a wholesome way. Most commendable is the division of the material for presentation so that the period of latency of sexual interest is *not* utilized for sex education. Recognition of the need for instruction in this field over a period of time, by teachers with whom the students are familiar rather than by a visiting expert, is important.

This reviewer believes that sexual education ideally is a function of family life, but until a Utopian state of parental enlightenment comes about, the sound presentation methods of this work should be given wide use.

BRYANT WEDGE, M.D.

Principles and Practice of Medicine. By Henry A. Christian, A.M., M.D., LL.D., (Hon.) Sch.D., Hon. F.R.C.P. (Can.), F.A.C.P. 16th edition. 1539 pp. Price $10.00. D. Appleton-Century Company, Inc., New York. 1947.

This is the sixteenth edition of the original Osler textbook of medicine, and it is the first to appear since 1944. It is the purpose of the author, Dr. Christian, and the publisher to revise this text at frequent intervals in order to keep abreast as well as possible of advancements in the field of medicine. Basically the text contains the same material as was found in the fifteenth edition. There are, however, many changes which are important to the student in medical school as well as to the practitioner who has need to refer frequently to a medical text.

The history of the previous editions is well written at the beginning of the book by Dr. James Carr of Northwestern University. It is a fascinating summary of the key changes in the early Osler editions and dramatizes the miraculous medical progress that took place between 1892 and 1946. This is one of the very few books that incorporates a resume of this sort; other frequently-revised medical books would do well to emulate this procedure.

A whole section in this text is delegated to functional diseases. The importance of psychosomatic medicine is stressed.

The section on infectious diseases is exhaustive in its scope. Complications and therapy are well presented. The Osler text has always been rich with suggestions for supportive care to the patient, and Dr. Christian has embodied most of these in his discussion of therapy for the various diseases. I particularly enjoyed some of the old-fashioned suggestions for local treatment of arthritis, especially the polyarthritis of acute rheumatic fever. Much of this therapy is overlooked in present day teaching, and whereas it may not be in the same class with our modern chemotherapy, there is no question but that the use of unguents to swollen joints is of value from the standpoint of soothing, both locally and psychologically.

In the section on liver diseases the presentation of infectious hepatitis is modern. The work done by research men during the late war is quoted, and particularly the clinical studies by M. Herbert Barker in the European theatre are obviously drawn on for much of the newer and revised material. With the exception of controversial use of methionine and choline, the modern concept of the treatment of infectious hepatitis as well as its sequelae, diagnosis, and laboratory data are extremely well covered.

There is a concentrated and well done two pages on aviation medicine outlining what it comprises and what is important for the men who specialize in this field. Since it has become such an important phase of over-all medicine, it is opportune to include the discussion of it in a modern medical text.

Metabolic diseases are well covered. Much space is devoted (as well it should be) to the management of diabetes. The various types of insulin are discussed briefly, although the author suggests that protamine zinc and crystalline insulin should be the insulins of choice. He therefore devotes most of the discussion to protamine zinc, crystalline, and amorphous insulins.

Heart disease is covered in its entirety, including a few pages on functional heart disease. The discussion of the latter is of great importance because so many people in this era have become quite cardiac conscious. The material is well handled and should help students as well as practitioners crystallize their ideas about what is and what is not organic heart disease. Little discussion of the use of digitoxin is included in the author's coverage of the various digitalis products. Most of the space is delegated to powdered digitalis leaf, but among the other products digitoxin is mentioned. The author indicates that probably this would become the drug of choice in the future. The leading men in the field of cardiology have been advocating the use of digitoxin for several years, and I believe it is the digitalis choice of the present. The outline of therapy for subacute bacterial endocarditis is far behind our present concepts. Considering that this was written around May of 1946, I am somewhat surprised that it went into print as it did. Mention is made of isolating the organism and testing its resistance in vitro to penicillin before starting penicillin therapy. The author completely ignores any result which may have been obtained in the test and advises penicillin be given intramuscularly or intravenously, 300,000 units a day and then if good results are not obtained to increase the dose gradually until a million units a day are given. Most workers in this field today agree that, after determining *in vitro* the resistance of the organism to penicillin, the lowest concentration of penicillin which will inhibit the growth of the organism should be quadrupled for immediate therapeutic administration to the patient.

Another criticism is the lack of specific dosages recommended in many instances. It is not sufficient to say that a person should receive potassium iodide or chloral hydrate, but the dosage which the author feels is indicated in average cases should be mentioned. This is of great value to the practitioner in the country or in a community where access to pharmacology texts, or books with dosage tables, is not available. On the other hand, the number of therapeutic agents which are recommended by the author give a practitioner plenty of room for trial in the event that one therapeutic agent fails. Streptomycin is included under those diseases on which it is known to have effect.

All in all the sixteenth edition is an excellent text and for those practitioners who want a ready and available source of information on general medicine, I would highly recommend Christian's text for their book shelf.

MORTON E. BERK, M.D.

The Medical Clinics of North America: Pediatrics. New York Number. 773 pp. Price $16.00 per year. W. B. Saunders Company, Philadelphia. 1947.

This symposium is a collection of articles and reports on clinical subjects of pediatric nature ranging from rheumatic fever to endocrinology. It represents the latest in pediatric thinking and observations in clinical work. It is of particular value to the man who sees children in his practice, and should be a "must" for every man doing pediatrics as a specialty. For the general practitioner it is an excellent reference work for a large number of unusual conditions.

D. C. MARSHALL, M.D.

Tuberculosis as it Comes and Goes. By Edward W. Hayes, M.D. 2d edition. 220 pp. Price $3.75. Charles C. Thomas, Springfield, Illinois. 1947.

The contents of this book would have to be good in order to offset the effect of so atrocious a title. I think we are justified in overlooking this fault and in benefitting from the material between the covers.

The book is written primarily for patients, but there is much of value to the medical profession—particularly to that vast majority to whom tuberculosis must of necessity be one of many: those who do not specialize in the disease. I can think of no better method of sampling this book than to quote some of the author's subtitles. Some of these have the flavor of detective fiction and should arouse interest of those who are primarily addicted to this type of reading matter.

"The real culprit" is used as a sub-heading for the chapter on the tubercle bacillus; "how the tiny culprit gets about" for theories of infection. Under control of infection is the statement: "tuberculosis always comes from tuberculosis." In this chapter there is a good deal of information about control which may seem simple, but it is often the simple things which are least known. In addition, there is a strong plea for the use of x-ray rather than fluoroscope in diagnosis, and also for the continued use of tuberculin testing, especially in schools, and in spite of miniature x-ray.

The section on diagnosis is probably the most important one to the general man. The four cardinal steps are: 1) skin test; 2) x-ray; 3) search for bacillus; 4) follow-up.

The subtitles of the chapters on treatment very aptly summarize the subject and in themselves contain the basic principles. "Treatment of the patient is more important than treatment of disease." Treatment of primary tuberculosis "is relatively simple." In treatment of secondary tuberculosis, "attention to details is the keynote to success." Rest is "the basic principle in treatment." Diet consists of "prudent feeding rather than over-feeding." "Environment is more important than climate." Heliotherapy "has no place in the treatment of pulmonary tuberculosis." Time is "the great healer." Mechanical therapy is "an adjunct to rest." "Tuberculosis is not cured by drugs." "The sanatorium is an atmosphere" and "the cure is a way of life" are abstractions which should be understood by every patient.

The chapter on pregnancy alone should justify the book to the general man. It is a convincing argument against the widespread practice of resorting to therapeutic abortion. The chapter is certainly worth consideration when called upon to make this difficult decision.

The section on rehabilitation is much too meager for so important a subject, and the use of actual x-rays rather than diagrams would have been more illuminating. But these are minor defects, and on the whole the book is a clear and concise presentation of the subject. The fact that the author was himself a patient has undoubtedly helped him make this book comprehensive to laymen as well as useful to the profession.

By far the most interesting chapter is that on Suggestions to Patients, contributed, not by the author, but by Laurence de Rycke, Ph.D. Reprints of this chapter should be given to every patient entering a sanatorium. Its fault is that it is written by a man with mental capabilities well above average, but the suggestions he makes for the use of time which is so often inexcusably wasted, should be helpful, even if incompletely understood and improperly followed.

It might be well to end this review with the subtitle—a quotation from Franklin Roosevelt—which establishes the atmosphere of this chapter: "The only limit to our realization of tomorrow will be our doubts of today."

GEORGE A. WILLIAMSON, M.D.

Diseases of the Chest. By Eli H. Rubin, M.D., and Morris Rubin, B.A., M.D. 667 pp. Price $12.00. W. B. Saunders Company, Philadelphia and London. 1947.

Dr. Eli H. Rubin and his brother, Dr. Morris Rubin, have in this book attempted to give us as complete a description as it is possible to give in one book of the diseases of the chest, both surgical and medical, as they are known at the present time.

The book is well written and easily read. Their discussion of the various diseases in the book is for the most part brief and ordinarily contains the most important facts to be considered in the diagnosis and treatment of the various types of chest diseases. They include the more recently and much discussed conditions such as histoplasmosis and also give a limited description of coccidioidomycosis of the lungs. The importance of the X-ray aspect of the disease in diagnosis is demonstrated in this book by the frequent illustrative photographs of X-rays of the various pathological conditions described. Numerous color plates are also included; these color plates have been drawn by Dr. Netter, originally for Ciba Pharmaceutical Products, Inc., and their worth has long been recognized by those of us who have been interested in chest diseases.

Important factors such as bronchial obstruction, its pathology, physiology, and diagnosis, diseases of the mediastinum and diaphragm, plus diseases of the lungs, which result from heart disease, are included in this excellent book. Principles of surgical treatment of thoracic diseases are included in the book. This too is an important aspect of diseases of the chest due to the fact that the medical management of chest diseases often may quickly become surgical. This emphasizes the close relationship of both the medical and surgical aspects of chest diseases; consequently such a section is not out of place in this book.

The section on tuberculosis is, of course, by no means complete since the subject is so wide in itself that a book of this type could not hope to cover anything but the high points; however, in this it does that fairly well.

This book in itself does not and could not give the whole story and last word in chest diseases. However, it is an excellent book to have at hand for any doctor who may be interested or who may at any time have a patient whom he wishes to study completely.

FREDERICK L. GILES, M.D.

Gynecology, Including Female Urology. By Lawrence R. Wharton, Ph.B., M.D. 1027 pp. Price $10.00. W. B. Saunders Company, Philadelphia and London. 1947.

Perhaps the greatest virtue of this book is the organization of the material. The entire field of gynecology is presented in a well outlined, clear and concise manner. Especially well done are the chapters entitled Physiology and Functional Disturbances. The fundamental problems, present knowledge and clinical applications have never been better said. It is always more reassuring to me to have these complex problems assayed and evaluated in concise words rather than in beautifully illustrated and disarmingly stated pamphlets we so often find on our desks.

The last 200 pages of this book are devoted to urological problems. This is in keeping with present gynecological thought and practice. In the past too little clinical attention has been paid to correlation of the intimate embryological derivation and pathological problems of the genitourinary systems.

Illustrations, while well chosen, for the most part are not new. Liberal use has been made of cuts from other books in this field that have been presented by the Hopkins group. The printing is good and the quality of the paper is better than we had become accustomed to during the war years. References to source material are given at the end of each chapter. While intended primarily for medical students this is an excellent text which anyone interested in this field could well afford to have on his shelves.

F. C. Spencer, M.D.

Physician's Handbook. By John Warkentin, Ph.D., M.D., and Jack D. Lange, M.S., M.D. 4th edition. 282 pp. Price $1.50. University Medical Publishers, P. O. Box No. 5067, Chicago. 1946.

The authors have produced in a pocket size edition an excellent compendium of medical information and figures. This book is intended primarily for fourth year medical students and interns who have studied all of the details pertaining to the facts that are given, for one who has not experienced medicine through the repetition of cases will most appreciate having these factual data of medicine at his fingertips. On the other hand, there is a great deal of numerical information in medicine to which all of us must refer frequently and for which a book of this type may serve as a convenient and ready reference.

As the preface to the fourth edition states, "The purpose of this HANDBOOK has been to summarize tersely, clearly and comprehensively diagnostic procedures and factual data which a physician must have quickly available." This book has succeeded admirably in that end, without making any attempt to go into detailed explanation of any of the facts presented, which it is assumed the reader thoroughly understands or for which he will consult original sources of information. When one attempts to produce such a book it must be understood that, because of the nature of this undertaking, it must be subjected to revisions almost annually. Such has been the case with this Handbook, of which editions appeared in 1941, 1942, 1944 and 1946—and already by the time it has left the press there will be new things that have come out which will not appear in its pages. Drugs that we are hearing a lot about now, such as tetraethyl ammonium are not to be found in this volume, as little was heard of them one year ago. Likewise, there is no mention of the new uses of paraminobenzoic acid, as in the treatment of typhus fever.

In general, this is an excellent volume which accomplishes the goal set for it. It far surpasses any other similar type of publication which I have seen. This book is a *must* for all interns and can be highly recommended to all practitioners of medicine. This is the type of book which one should not only purchase once but should keep up to date with the new editions as they appear.

L. Clagett Beck, M.D.

P-Q-R-S-T, a Guide to Electrocardiogram Interpretation. By Joseph E. F. Riseman, M.D. 84 pp. 2nd edition. Price $3.50. The Macmillan Company, New York. 1947.

This second edition of Dr. Riseman's "A Guide To Electrocardiogram Interpretation" is an extremely useful manual. It is small enough to slip into a coat pocket, and its simplicity is such that with its aid most physicians should be able to read the average ECG.

This is a primer for those physicians who are interested in understanding ECG's. The author admits his book does not cover all the fine points, but it will help the doctor who is interested in reading his own tracings. He stresses the importance of using the ECG only as a diagnostic aid. The clinical examination is most important, and the ECG should be used to aid or confirm this diagnosis.

There are several factors which make this little handbook unusual. One is the method of breakdown for each part of the ECG and an intensive study of that part. For example, the discussion of the "P" wave includes all the aspects of that wave. The various conditions which produce both the normal and abnormal "P" waves are listed, and those conditions which are most commonly found in conjunction with either the normal or abnormal are capitalized. Another feature of the book is the tab form at the edge of each page which indexes that part of the ECG in which one might be particularly interested. To look up something about the "P-R" interval the book may be opened quickly where the tab of "P-R" appears in a black block. Precordial leads and their importance are amply demonstrated with interpreted tracings. Both "V" and "C" precordial leads are represented, and no attempt is made by the author to place the value of one above the other. At the end of the manual there are thirty-one brief case histories with their associated ECG's. The reading of the tracing follows the history, and then the interpretation of the reading completes each case. Both normal and abnormal conditions are included.

For any physician who is interested in electrocardiography enough to want to interpret tracings of his patients, I would highly recommend Dr. Riseman's manual as a simple, instructive guide.

Morton E. Berk, M.D.

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NOTES ON A MAINLAND TRIP

. . . one of the nice things about flying with United Airlines is the pre-takeoff treatment . . . coffee and cigarettes, served in attractive surroundings . . . on Sunday, May 18, about 7:00 in the morning, I took off for San Francisco on the first leg of my trip to the Medical Library Association meeting at Cleveland, Ohio . . . discovered Dr. and Mrs. Pinkerton among those aboard . . . the nine-hour flight east was punctuated at the right intervals with breakfast, lunch, cocktails, and then a buffet dinner . . . one does not go hungry . . . landing about sunset with the hills of California glowing golden beneath us . . . first professional stop happened to be the library of the Cutter Laboratories, in Oakland . . . a small affair, but particularly good in the chemical and biological journals, with an excellent representation of foreign publications in these fields . . . Cutter borrows from Cal or Stanford medical libraries . . . they offered our library any duplicates of their biochemical files . . . spent some time in their labs, where they were preparing dried plasma and glucose, and working on a new type blood filter . . . the UC Medical Center Library, housed in an old frame building out Parnassus way, had a large staff and a large collection . . . used mainly by students and doctors on the school staff . . . are very short on space, and have high stacks jutting out into the main room, making a series of alcoves . . . big dental collection . . . liberal circulation rules . . . Stanford's library on Sacramento St. . . . a long street car ride from the center of town . . . a fine collection, in fine condition . . . particularly good on medical history, and much foreign material . . . seem to be hampered by lack of staff and funds . . . cannot do much reference work as a result . . . stopped on Washington St. to visit the San Francisco County Medical Society Library . . . housed in the interesting old Irwin residence . . . very small collection of bound volumes . . . doctors considering discontinuing this library since they have access to the other two . . . may sell old volumes . . . then, on Friday, I left the Bay Area for Chicago . . . stayed at the Palmer House . . . my first taste of big city life since the war . . . managed to see Joe E. Brown in "Harvey" . . . inspected the Northwestern University medical and dental libraries . . . most impressive . . . excellent staff using latest methods . . . visited the John Crerar Scientific Library on Randolph St. . . . Miss Salmonsen, the librarian, most gracious and charming personality . . . the collection is outstanding . . . and open to the public . . . all their work is reference . . . no material can circulate . . . have almost anything a doctor or any scientific worker could desire . . . on a windy day . . . very windy . . . wished I had weighted skirts . . . walked over to the AMA building on Dearborn St. . . . Mrs. Moore showed me around . . . they receive all medical journals primarily for indexing use . . . saw the July-Dec. 1946 Index Medicus still in card form . . . labor troubles with printers holding up publication . . . negotiating with other printers . . . kept busy training assistants for indexing due to restlessness in all working conditions . . . they keep only journals for past ten years, turning over old files to the Army Medical Library . . . tear up duplicates for pamphlets to be used in their package service . . . available only to doctors inside the continental limits, unfortunately . . . then on to Cleveland for the 46th annual meeting of the Medical Library Association . . . May 27 through 29 . . . nearly two hundred librarians registered . . . from all over the country . . . Cleveland hosts gave us a wonderful time . . . toured Dittrick Museum of Historical Medicine and the Army Medical Library Branch, both housed in the Cleveland Library building . . . one of the most beautifully designed I've ever seen . . . a memorial to the name of Dr. Allen . . . several rare collections . . . heard Dr. Morris Fishbein speak at Wade Park Manor dinner . . . guests, the next evening, at a buffet given by Dr. and Mrs. Robert Stecher at their beautiful

estate on the Lake shore . . . at the Association meeting two points of business brought up the first day . . . proposed revision of the exchange service organization, and a recommended training program for medical librarians . . . a most necessary and forward-looking proposal . . . a discussion of the value of regional meetings for medical librarians and other problems peculiar to the profession were argued . . . reports of committees . . . election of new officers, etc. . . . most of the subjects considered were timely and interesting, but we of the "Junior League" agreed that the informal confabs after hours were more productive of practical ideas . . . also, the opportunity to become better acquainted . . . so that the medical libraries we represented might become more than a name on a letterhead . . . was asked by many why Honolulu would not be a good place for one of the next meetings . . . they'd all love to be invited . . . Dr. Ballard of the Boston Medical Library invited us to visit his library if we were going further east . . . Texas's Dr. Chauncey Leake was there, and wanted to be remembered to his friends in Hawaii . . . as did Colonel Harold Jones . . . Dr. Dittrick sent messages to Dr. Pleadwell . . . then a side-trip to Washington State and Canada for a two weeks vacation with the family . . . revisited the Spokane and Seattle County Society libraries . . . and back to Hawaii.

ETHEL HILL,
Librarian

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RECENT ACQUISITIONS

Gynecology and Obstetrics

DeLee, J. B. *Principles and practice of obstetrics.* 9th ed. c1947. (Gift of publisher).

McCormick, C. O. *A textbook on pathology of labor, the puerperium and the newborn.* 2nd ed. c1947.

Wharton, L. R. *Gynecology; with a section on female urology.* 2nd ed. c1947. (Gift of publisher).

Miscellaneous

Biester, L. L. *Units in personal health and human relations.* c1947. (Gift of publisher).

Collins, Joseph *The doctor looks at literature.* c1923.

Comroe, B. I. *Arithritis and allied conditions.* 3rd ed. c1944.

Harries, E. H. R. *Clinical practice in infectious diseases.* 3rd ed. 1946.

Katz, L. N. *Electrocardiography.* 2nd ed. rev. c1946.

Lederer, F. L. *Diseases of the ear, nose and throat.* c1938. (Gift of Dr. Cloward).

Ross, T. A. *The common neuroses.* 2nd ed. 1937.

Stimson, P. M. *Manual of the common contagious diseases.* 14th ed. c1947.

Warkentin, John *Physician's handbook.* 4th ed. (Gift of publisher).

Wolff, Eugene *A pathology of the eye.* 2nd ed. 1946.

Nursing (from Nurses' Association)

Averill, L. A. *Psychology applied to nursing.* 3rd ed. c1946.

Biddle, H. C. *The mathematics of drugs and solutions.* 3rd ed. c1945.

Brookes, H. S. *A textbook of surgical nursing.* 2nd ed. c1940.

Brown, A. F. *Medical nursing.* c1945.

Burdon, K. L. *Textbook of microbiology.* 3rd ed. rev. c1947.

Crossen, R. J. *Gynecologic nursing.* 3rd ed. c1946.

Cutting, W. C. *Actions and uses of drugs.* c1946.

Deming, Dorothy *Careers for nurses.* c1947.

Densford, K. J. *Ethics for modern nurses.* c1946.

Eliason, E. L. *Surgical nursing.* 7th ed. c1945.

Emerson, C. P. *Essentials of medicine.* 15th ed. c1946.

Faddis, M. O. *Textbook of pharmacology for nurses.* 2nd ed. c1943.

Fash, Bernice *Body mechanics in nursing arts.* c1946.

Felter, R. K. *Surgical nursing.* 4th ed. c1946.

Foote, John A. *State board questions and answers for nurses.* 24th ed. c1947.

Funsten, R. V. *Orthopedic nursing.* c1943.

Gelinas. Agnes *Nursing and nursing education.* c1946.

Goostray, Stella *Problems in solutions and dosage.* c1945.

Gordon, H. P. *Counseling in schools of nursing.* c1947.

Gotten, Nicholas *Neurologic nursing.* c1945.

Harrison, Gene *The nurse and the law.* c1945.

Heidgerken, L. E. *Teaching in schools of nursing.* c1946.

Jensen, D. M. *The principles and practice of clinical instruction in nursing.* 2nd ed. c1946.

Jessee, R. W. *Self-teaching tests in arithmetic for nurses.* 2nd ed. c1945.

Karnosh, L. J. *Psychiatry for nurses.* 2nd ed. c1944.

McGrath, B. J. *Nursing in commerce and industry.* c1946.

Moersch, F. P. *Neurology and psychiatry for nurses.* c1946.

Morris, E. H. *Public health nursing in syphilis and gonorrhea.* c1946.

Ockerblad, N. F. *Urology for nurses.* 2nd ed. c1943.

Parkinson, R. H. *Eye, ear, nose and throat manual for nurses.* 5th ed. c1944.

Parsons, E. J. *In the doctor's office.* c1945.

Price, A. L. *Professional adjustments I.* c1946.

Robinson, Victor *White caps.* c1946.

Sellew, Gladys *A history of nursing.* c1946.

Sellew, Gladys *Sociology and social problems in nursing service.* 2nd ed. c1946.

Smith, E. M. *Solutions in ten lessons.* 5th ed. rev. c1944.

Triggs, F. O. *Personnel work in schools of nursing.* c1945.

Turner, C. E. *Personnel and community health.* 7th ed. c1943.

Waterman, T. L. *Nursing for community health.* 2nd ed. c1947.

Williams, J. F. *Personal hygiene applied.* 8th ed. c1946.

Pharmacology and Therapeutics

A. M. A., Council on Pharmacy and Chemistry *New and non-official remedies.* 1947. (Gift of publisher).

Committee of Revision, U.S.P. *Pharmacopoeia of United States of America.* 13th rev. 1947. (Gift of U.S.P.C.).

Hawaii Dietetic Association, Diet Therapy Committee. *The Hawaii diet manual.* c1947. (Gift of Hawaii Dietetic Association).

Kolmer, J. A. *Penicillin therapy.* 2nd ed. c1947.

Spies, T. D. *Experiences with folic acid.* c1947. (Gift of publisher).

Wiselogle, F. Y., ed. *A survey of antimalarial drugs.* 1941-45. 2v. c1946. (Gift of Library of Congress).

Surgery

Brown, G. Van I. *The surgery of oral and facial diseases and malformations.* 4th ed. rev. c1938. (Gift of Dr. Cloward).

Maliniak, J. W. *Sculpture in the living.* c1934. (Gift of Dr. Cloward).

Portmann, Georges *A treatise on the surgical technique of otorhinolaryngology.* c1939. (Gift of Dr. Cloward).

Tuberculosis

Brieger, E. M. *The Papworth families.* 1946. (T.B. Association).

Hayes, E. W. *Tuberculosis as it comes and goes.* 2nd ed. c1947. (Gift of publisher).

Rubin, E. H. *Diseases of the chest.* c1947. (Gift of publisher).

NOTES AND NEWS

PERSONALS

DR. F. L. GILES, of Honolulu, has been certified by the American Board of Internal Medicine and also in the sub-specialty of Pulmonary Diseases. He is also a Fellow of the American College of Chest Physicians and an Associate of the American College of Physicians.

DR. LYLE BACHMAN, until recently the resident at Kapiolani Hospital, has become associated with DRS. BATTEN and BELL, and will specialize in obstetrics and gynecology. Dr. Bachman is a native of Utah and a graduate of Rush Medical College of the University of Chicago, in 1941. He interned in Chicago and following a tour of duty in the Navy has been the resident physician at Kapiolani Hospital for the past two years.

DR. F. J. HALFORD, of The Medical Group, has left to take a year of post-graduate study at Columbia University in New York, where he will specialize in industrial medicine, labor relations, labor management and health education. When Dr. Halford returns he will become director of the industrial medical service bureau of The Medical Group.

DR. MARQUIS E. STEVENS, of the Fronk-Wynn Clinic, has returned after an extended trip, during which he attended several medical conventions as well as studies in Boston, New York and Madison, Wisconsin.

DR. GILBERT M. HALPERN, of Honolulu, has returned to his practice after spending the summer in California and New York City.

DR. HOMER R. BENSON, of Honolulu, is attending the International Post-Graduate Medical Assembly in St. Louis, following which he will take a course at the Cook County Hospital in Chicago.

DR. R. B. CLOWARD, of Honolulu, attended a post-graduate course of the National Foundation for Infantile Paralysis in San Francisco as the representative of the Hawaii Chapter. Following this he visited the Salt Lake City Centennial, this being his former home. His father and mother, DR. AND MRS. RALPH E. CLOWARD, formerly of Honolulu, returned with him for their first visit since 1939, when Dr. Cloward retired from The Clinic.

DR. TERUO YOSHINA, of Honolulu, has been honored by his election to Fellowship in the American Academy of Pediatrics. Dr. Yoshina recently moved to Honolulu from Hilo.

DR. RICHARD Y. NODA has returned to Honolulu after an absence of nine years. After graduation from the University of Hawaii in 1938 he attended the St. Louis University School of Medicine, receiving his M.D. degree in 1942. He interned in St. Louis and was resident physician at the Bethesda and Silver Cross Hospitals before entering private practice in Chicago for two years. While in Illinois, Dr. Noda was married to Miss Helen Larsen, who was assistant superintendent of nurses at the Silver Cross Hospital. Prior to locating in Honolulu, Dr. Noda is temporarily taking the practice of DR. WALTER M. OZAWA, who is on the mainland.

DR. RICHARD SAKIMOTO, Honolulu obstetrician and gynecologist, has been honored by his unopposed election to the presidency of University of Hawaii Alumni Association.

DR. AND MRS. THOMAS F. FUJIWARA, of Honolulu, became parents of a daughter, their third, at The Queen's Hospital, on July 9.

DR. H. MCLEOD PATTERSON, formerly of Olaa, has moved to Honolulu and opened offices for the practice of obstetrics and gynecology in the King Kalakaua Building.

DR. L. Q. PANG, of Honolulu, has resumed his practice after spending two months in Chicago with Dr. George E. Shambaugh, Jr., in fenestration surgery for otosclerosis, as well as visiting clinics in St. Louis.

Their first child, Christa Lee, was born to DR. AND MRS. CASEY DOMZALSKI, chief medical resident at The Queen's Hospital, on August 8.

DR. AND MRS. PHILLIP S. ARTHUR, of Honolulu, are parents of their second child, Peter Linn, born at the St. Francis Hospital August 6.

DR. CARL PETERSON, Secretary of the Council on Industrial Health of the American Medical Association, visited Honolulu, Hawaii, and Kauai during August on the invitation of the H.S.P.A. Mrs. Peterson accompanied him. Dr. Peterson addressed the Honolulu County Medical Society on August 27, at a special evening meeting, on the subject of the physician and industry.

DR. FRED M. K. LAM, son of DR. FRED K. LAM, who recently started his interneship at The

Queen's Hospital, was married on August 14 to Miss Marie Link. The wedding took place at the Sacred Heart Church, Honolulu, and a reception was held at the Ala Wai Commissioned Officer's Club. Mrs. Lam is a graduate nurse at the Children's Hospital.

Dr. Sumner Price, medical director and pathologist at The Queen's Hospital, was married on July 19 to Mrs. Ysobel Tyer Johnson in the chapel of Central Union Church. Dr. John Manwaring, resident in pathology at Queen's, was the best man.

Dr. Fred Irwin, medical director of the Kuakini Hospital and of the HMSA, was honored in July by a testimonial dinner at the Hilo Yacht Club by the Hawaii County Medical Society. Dr. Irwin served as a plantation physician for thirty-five years on Hawaii before coming to Honolulu in 1939 for his "retirement." As a goodwill expression to the Hawaii County Medical Society a framed portrait of Dr. Irwin was presented by Mr. Neal Ifversen, general manager of the HMSA, to the Society, the portrait to hang in the Fred Irwin Library of the Hilo Memorial Hospital.

The new internes and residents at The Queen's Hospital are as follows: David K. Gesses, a native of Santa Ana, California, who is a graduate of the University of Maryland Medical School, 1947; Keith F. O. Kuhlman, a native of Hilo, Hawaii, a nephew of Dr. V. A. S. Osorio, formerly of Honolulu, and a graduate of Loyola Medical College, Chicago, 1947; Fred M. K. Lam, son of Dr. Fred K. Lam, of Honolulu, who is a graduate of St. Louis University Medical School, 1947; Gail G. L. Li, son of Dr. Min Hin Li, of Honolulu, who is a graduate of Jefferson Medical College, 1947. On the resident staff is Richard S. Horio, a graduate of the University of Utah, 1944, who recently completed a residency at the Kuakini Hospital and is now an assistant resident in medicine. Francis Lau, who has completed his interneship at The Queen's Hospital, is now also an assistant resident in medicine.

At the Kuakini Hospital, Dr. Clyde H. Ishii, a native of Kauai, has been added to the resident staff. Dr. Ishii is a graduate of Jefferson Medical College, Philadelphia, in 1934, following which time he has served in various hospitals in New York City including Manhattan General and Gotham Hospitals, as well as private practice in New York.

Kapiolani Hospital has added two full-time residents to their staff. Dr. Robert D. McKee, a graduate of the University of Texas Medical School, 1939, and a native of Galveston, Texas, served in the Army for five years following his interneship. Three years of his Army service were on Oahu, during which time he had charge of the Obstetric and Gynecologic clinics at various posts. Dr. Charles Shudholt, a native of Missouri, is a graduate of Washington University Medical School, 1943, and completed a year of interneship at St. Luke's Hospital in St. Louis, Missouri, where he also had a nine months' residency. He was stationed at Tripler General Hospital for two years with the Army.

Dr. Lyle G. Phillips, of Honolulu, enjoyed a plane trip to the Pacific Northwest in August on the official Chamber of Commerce of Honolulu trip to that region. The trip included thirty-two of the leading business and professional men of Honolulu.

Licenses to practice medicine and surgery in the Territory of Hawaii have been issued to the following: Dr. Leo Bernstein, of Hilo, a graduate of Tufts College Medical School, Boston; Dr. Shigeki Hayashi, of Kealakekua, Hawaii, a graduate of Western Reserve University Medical School, Cleveland; Dr. Charles S. Judd, Jr., temporarily at Kaunakakai, Molokai, a graduate of Yale University Medical School; Dr. Edward T. Matsuoka, a native of Olaa, Hawaii, now a resident at St. Francis Hospital, Honolulu, and a graduate of the Medical College of Virginia; Dr. Francis Y. K. Lau, a native of Honolulu, who was graduated from the College of Medical Evangelists and is the medical resident at The Queen's Hospital, Honolulu; Dr. Grace Hall Hedgecock, a graduate of the Women's Medical College of Philadelphia, who has recently completed a medical residency at The Queen's Hospital; Dr. Earnest J. Young, a graduate of the University of Nebraska Medical School, now associated with the Medical Group, Honolulu; Dr. Lyle Bachman, a graduate of the Rush Medical School of the University of Chicago, now located with Drs. Batten and Bell, Honolulu.

Dr. Arthur W. Duryea, of Honolulu, has changed locations from Hawaii for health reasons and is now practicing in Soledad, California.

Dr. Alfred S. Hartwell, of The Clinic, has returned after a prolonged stay on the mainland during which he successfully completed the examinations for certification by the American Board of Internal Medicine, and was also certified in the sub-specialty of Cardiology by separate examination.

* * *

Maui

Dr. A. H. Y. Wong has been appointed head physician of the Malulani Hospital, Wailuku. Dr.

Wong recently completed six months as resident at the St. Francis Hospital, Honolulu. He is a graduate of Tulane University Medical School and served in the Army for two years.

Molokai

DR. RAYMOND T. EKLUND, of Kaunakakai, is spending a prolonged vacation on the mainland, his first in twelve years. During this time his practice is being handled by DR. CHARLES S. JUDD, JR., who recently completed his interneship at The Queen's Hospital.

HONOLULU OBSTETRICAL AND GYNECOLOGICAL SOCIETY

This society was recently newly formed and is in the process of becoming organized. Their first meeting was held on August 18 at the Mabel Smyth Building at which time two papers were presented. DR. FRANK C. SPENCER gave a paper on "Prolonged Labor," which was followed by a case report by DR. ALVIN V. MAJOSKA on "Uterotubal Implantation with Successful Pregnancy."

HONOLULU SURGICAL SOCIETY

A regular meeting of this society was held on August 29 at the Mabel Smyth Building at which time a symposium of neurosurgical conditions was presented by DRS. R. B. CLOWARD and T. S. BENNETT.

The next meeting of this society will be held on Friday, October 17, it being the policy to hold meetings every two months on the third Friday.

HOSPITAL NEWS

Formal benediction of new wing to the St. Francis Hospital, Honolulu, was given by the Most Reverend James J. Sweeney at impressive ceremonies on Sunday, August 17. This represented the culmination of a long-planned building program by the Sisters of St. Francis, materially aided by the Federal Government through its financial assistance. The new wing provides for adequate administrative space and a large out-patient clinic, as well as for greatly increasing the bed capacity of the hospital both by means of the new rooms on floors in the new wing as well as the added space available from the moving of the administrative offices out of the older portion. The Sisters of St. Francis are to be congratulated for this great step forward which they have made by their diligent, efficient work.

MEDICAL AND SURGICAL FILMS

The Academy-International of Medicine, 214 West Sixth Street, Topeka, Kansas, has informed the JOURNAL that it has available copies of a catalogue compiled by it, listing many motion pictures on various medical and surgical subjects, including the source from which the films may be obtained. The catalogue is free and will be sent to any physician requesting it.

HOSPITAL LAYOUT SKETCHES

Dr. W. B. Meister, Director of the Division of Hospital Planning, Territorial Health Department, has copies of layout sketches for hospitals of various sizes (50 to 200 beds), community clinics and health centers, and rural hospitals and health centers. Interested persons may obtain these sketches by writing to him at the Health Department or by calling him on the Territorial phone, local 238.

Hospital subdivision sketches include:

Nursery units or floors
Nurseries for the newborn
Obstetric suites
Formula rooms
Delivery suites
Central storage areas
Administration suites
Laboratories
Mortuaries
Radiographic suites
Occupational therapy suites
Pharmacies
E.E.N.T. suites
Operating suites
Cystoscopic suites
Fracture rooms
Central sterilizing and supply suites
Emergency suites
Contagious disease units
Pediatric nursing units
Kitchens and dining rooms
Laundries
Out-patient suites
Record storage areas
Doctor's offices
Dental suites

THE AMERICAN COLLEGE OF PHYSICIANS
Annual Session at San Francisco April 19-23, 1948

The American College of Physicians will conduct its 29th Annual Session at San Francisco, April 19-23, 1948. General Headquarters will be at the Civic Auditorium. Dr. William J. Kerr and Dr. Ernest H. Falconer, both of San Francisco, are the Co-Chairmen for local arrangements and the program of Clinics and Panel Discussions. The President of the College, Dr. Hugh J. Morgan, Professor of Medicine at Vanderbilt University School of Medicine, Nashville, Tennessee, is in charge of the program of Morning Lectures and afternoon General Sessions.

NORTON MEDICAL AWARDS INVITES MANUSCRIPTS

W. W. Norton & Company are again offering the Norton Medical Award for book manuscripts written for the lay public by professional workers in the field of medicine. Terms of the Award have been slightly altered. The publishers now set no final closing date for the submission of manu-

scripts which may be submitted at any time, the Award not being limited to any one year. The Norton Award offers $5000 as a guaranteed advance against royalties. Either complete manuscripts or detailed table of contents together with one hundred pages of manuscript may be submitted. A descriptive folder giving full details of the terms of the Award may be secured on request from the publishers, W. W. Norton & Co., Inc., 101 Fifth Avenue, New York 3, N.Y.

Books that have previously won Norton Medical Awards are THE DOCTOR'S JOB by Carl Binger, M.D., DOCTORS EAST, DOCTORS WEST by Edward H. Hume, M.D., and A SURGEON'S DOMAIN by Bertram M. Bernheim, M.D., published this spring.

RESEARCH FELLOWSHIPS—THE AMERICAN COLLEGE OF PHYSICIANS

The American College of Physicians announces that a limited number of Fellowships in Medicine will be available from July 1, 1948-June 30, 1949. These Fellowships are designed to provide an opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. Assurance must be provided that the applicant will be acceptable in the laboratory or clinic of his choice and that he will be provided with the facilities necessary for the proper pursuit of his work.

The stipend will be from $2,200 to $3,000.

Application forms will be supplied on request to The American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa., and must be submitted in duplicate not later than November 1, 1947. Announcement of the awards will be made as promptly as is possible.

CALLING ATTENTION TO: Items of possible interest to friends of Chauncey D. Leake

June, 1947

1. ARMY MEDICAL LIBRARY: Note brief historical survey by R. Hood (*Science* 105:422, Apr. 25, '47). Urgent support needed for essential fire-proof building near Library of Congress. Support also needed to arrange details of cooperation with A.M.A. for full author subject monthly comprehensive index to world medical literature, cumulative annually. Contributions solicited by Consultants: Write Col. Harold Jones, Library of Congress, Washington, D. C.

2. FEDERATION PROCEEDINGS: Program and Abstracts (*Fed. Proc.* 6:1, '47) of Chicago session from synthetic penicillin to neutralization of bacteriophage offer extended picture of patient picking of isolated bits of data. Much on renal and cardiac function, hypertension, enzymes, nucleic acids, autonomic drugs, nerve conduction, antibiotics, chemotherapy, drug toxicity, and vitamins. Univ. of Rochester group reports on pharmacology of uranium. Session on biometrics, biophysics, performance, shock, repair, teaching and research methods. Not much on radioactive tracers. Over 1900 authors!

3. PHYSIOLOGICAL: G. E. Cartwright reviews (665 ref.) dietary factors in erythropoiesis (*Blood* 2:111, 140, 257, '47). E. C. Mason suggests CO_2 loss is a factor in mobilization of body fluids (*Ann. Int. Med.* 26:561, '47). D. Gabor discusses acoustical quanta and the theory of hearing (*Nature* 159:591, May 3, '47). C. L. Schneider shows active principle of placental toxin to be thromboplastin (causing toxemia of pregnancy?), inactivated by heparin (*Amer. J. Physiol.* 149:123, '47). G. Schloss suggests that renal tubules help produce renin (*Helv. Med. Acta* 14:22, '47). S. C. Way further reports on reticulum and lattice fivers (*Arch. Dermat. Syph.* 55:478, '47). A. Lawson and C. Rimington observe antithyroid action of erothioneine, a normal blood constituent (*Lancet* 1:586, May 3, '47). S. W. Wortis, G. Bateson, W. E. Galt, M. Herman, A. C. Kinsey, and W. C. Young discuss physiological and psychological factors in sex behavior (*Ann. N. Y. Acad. Sci.* 57:603, '47). N. Emmelin describes broncho-constricting action of bile acids (*Acta Physiol. Scand.* 13:20, '47). A. Arvanitaki and N. Chalazonitis discuss relation of activity potentials to respiratory catalysts (*Arch. Internat. Physiol.* 54:406, '47). R. M. Kark & Large Co. of Canadian and U. S. Colleagues disprove myth of necessary deterioration of white men in the tropics (*Medicine* 26:1, '47). E. N. Harvey and J. H. McMillen study shock waves in tissues from impact of high velocity missiles (*J. Exp. Med.* 85:321, '47). J. R. Klein and N. S. Olsen find induced convulsions go with decreased brain glycogen, glucose, and adenosine triphosphate, and increased lactate and inorganic phosphorus (*J. Biol. Chem.* 167:747, '47). W. Trager isolates a fat soluble material from plasma having the biological properties of biotin (*Proc. Soc. Exp. Biol. Med.* 64:129, '47).

4. PHARMACOLOGICAL: I. Chavez & Co. describe diagnostic value of direct intracardiac angiocardiography with diodrast (50cc 70% sol. in 1 second) (*Amer. Heart J.* 33:560, '47). D. P. Cuthbertson and Jac Knox confirm G. Alles (*Amer. J. Physiol.* 136:392, '47) and P. K. Knoefel (*Fed. Proc.* 2:83, '47) that benzedrine and methedrine reduce fatigue (*J. Physiol.* 106:42, '47). M. M. Gertler and D. Karp find atabrine helpful in auricular fibrillation (*Proc. Soc. Exp. Biol. Med.* 64:213, '47). W. H. Hall and W. W. Spink note sensitivity of *Brucella* to streptomycin and growth of resistance during treatment (*Ibid* p. 403). J. V. Scudi and W. Antopol note pharmacological features of bacitracin (*Ibid* p. 503).

5. AND SO ON: P. A. Owren describes parahemophilia—a hemorrhagic condition due to absence of unknown clotting factor (*Lancet* 1:446, Apr. 5, '47). F. A. Denz reviews hunger edema (*Quart. J. Med.* 16:1, '47). K. R. Eriksen notes even sensitive bacteria may produce penicillinase (*Acta Path. Microbiol. Scand.* 23:489, '47). J. M. Mackintosh pleasantly suggests applying child guidance principles to old age (*Lancet* 1:659, May 17, '47). J. N. Walton discusses physical factors in continuous intravenous infusions (*Ibid* p. 662). N. R. Pai describes nature and treatment of writer's cramp (*J. Ment. Sci.* 93:68, '47). T. Braatov discusses experimental neurasthenia and intellectual overstrain (*J. Nerv.*

Ment. Dis. 105:477, '47). C. P. Rhoads describes cancer as a systemic disease (*Amer. Rev. Soc. Med.* 4:333, '47 and C. M. Pomerat discusses ACS, p. 340). In pleasant note of farewell, H. E. Sigerist discusses nationalism and internationalism in medicine (*Bull. Hist. Med.* 21:5, '47). A. J. Coale analyses the problem of reducing vulnerability to atomic bombs (Princeton Univ. Press, '47, 190 pp., $2.00). N. R. Stoll describes this wormy world (*J. Parasitol.* 33:1, '47).

July, 1947

1. NEW BOOKS: Richly merited is the testimonial volume to Willstatter's great pupil, Arthur Stoll (Stoll Festschrift, B. Schwabe, Basle, '47, 688 pp. Sw. Fr. 30). Excellent is C. Singer and C. Rabin's *Prelude to Modern Science: Being a discussion of the History, Sources and Circumstances of the Tabulae Anatomicae Sex of Vesalius* (Wellcome Hist. Med. Mus., Cambridge Press, 144 pp., '47, with facsimile [why not all in folio?], 50s). M. Spiegel-Adolf and G. C. Henny offer *X-Ray Diggraction Studies in Biology and Medicine* (Grune and Stratton, New York, '47, 222 pp., $5.50). J. Adriani discusses *Techniques and Procedures of Anesthesia* (C. C. Thomas, Springfield, Illinois, '47, 408 pp., $6.00). F. J. Hodges and Company write stimulating *Radiology* for Medical Students (Yearbook, Chicago, '47, 424 pp., $5.00). W. J. Dann and G. H. Sattfielf edit Vol. XII *Biological Symposia. Estimation of Vitamins* (Ronald Press, New York, '47, 531 pp., $6.50).

2. BLOOD: G. R. Minot succinctly discusses diagnosis and treatment of macrocytic anemias (Trans. Stud. Coll. Phys. Phila. 15:1, '47). C. J. Watson and Co. report purpura following estrogen therapy (*J. Lab. Clin. Med.* 32:607, '47). W. Wilhemij reports average size of erythrocytes increases with emaciation (*Acta Med. Scand.* 128:274, '47). S. P. Lucia and M. L. Hunt describe significance of deviations from average myeloid maturation curve from sternal bone marrow smears (*Am. J. Med. Sci.* 213:686, '47). H. R. Gutmann & Co. note that nicotinamide aids in reduction of methemoglobin by methylene blue and that reduced phosphophyridine nucleotide causes rapid reduction of methb. (*J. Biol. Chem.* 169:145, '47). A. Fischer (Carlsberg Fd., Copenhagen) neatly reviews participation of blood proteins in metabolism of tissue cells (*Biol. Rev. Cambridge Philo. Soc.* 22:178, '47). J. Gonzales Q. and C. A. Angere suggest adrenal cortical hormone essential for O_2 uptake of red cells (*Am. J. Physiol.* 149:502, '47).

3. CANCER: Important survey of chemical carcinogenesis appears (*Brit. Med. Bull.* 4:309, '47) including A. Haddow on mechanism of carcinogenesis, H. G. Crabtree on anticarcinogenesis, E. Boyland on metabolism of carcinogenic compounds, H. Burrows on estrogens and neoplasia, S. A. Henry on occupational cancer, and A. Haddow on chemotherapy of cancer. T. Hanschka and Co. find T. Cruzi inhibits mouse tumors nonspecifically and without promoting survival (*J. Nat. Cancer Inst.* 7:189, '47).

4. PHARMACOLOGICAL: K. W. Donald well describes oxygen poisoning in man, emphasizing CNS involvement (*Brit. Med. J.* 1:712, May 24, '47). E. K. Marshall well reviews principles, methods and results of chemotherapy (*Med.* 26:155, '47). W. H. Fishman proposes that B. glucuronidase is essential to estrogen action (*J. Biol. Chem.* 169:7, '47). S. C. Sulkin and C. Zarafonetis continue studies on inhibiting effects of ether on neurotropic viruses (*J. Exp. Med.* 85:559, '47). P. H. Nexmand and O. Sylvest show that while the dimethyl aminoethyl benzylanilines ("antargan") or benzhydryl ethers ("benadryl") do not prevent histamine urticaria, they do reduce symptoms (*Acta Dermato. Ven.* 27:231, '47). T. T. Puck analyses mechanism of aerial disinfection by glycols (*J. Exp. Med.* 85:729, '47). R. Patiala notes antibiotic action of allyl isosulfocyanates on various dermatophytes (*Ann. Parasitol.* 21:338, '47). T. F. Dougherty and A. White offer evidence that rate of release of gamma globulin from lymphocytes is controlled by pituitary adrenal cortical secretion (*J. Lab. Clin. Med.* 32:584, '47). B. H. Robbins and J. S. Lundy review curare and relatives (*Anesth.* 8:252, '47). N. A. David and A. C. Kirchhof find that hydroxyalkylamide contributes to action of lysergic acid and specifically to uteroactivity (*Schweiz Med. Woch.* 77:13, Jan. 11, '47). D. Bovet and Co. report curare action of quinoyloxy pentane di-iodo ethylate (*Comp. Rend. Acad. Sci.* 223: 597, '46).

5. NOTABLE: For fine objective reporting on sociological and mental hygiene problems, see Rebecca West's *Opera at Greenville* in the June 14 *New Yorker.* H. R. R. Grieve reflects on freedom (*Med. J. Austral.* 1:545, May 3, '47). Pleasant historical turn highlighted inaugural of Thomas Addison (1793-1860) Lectures at Guy's Hospital by E. C. Dodds (*Lancet* 1:699, May 24, '47). K. Lenggenhager offers evidence that physical and mental disturbance from long hyperventilation are due to alkalotic hypocapnia rather than to tissue hypoxia (*Helv. Med. Acta* 14:137, '47). C. A. Mills and Co. further show increased thiamine requirement in tropics (*Amer. J. Physiol.* 149:376, '47). H. Hoagland well discusses enzyme kinetics and dynamics of behavior (*J. Comp. Physiol. Psychol.* 40:107, '47). E. D. Adrian philosophizes wisely in his Hughlings Jackson Lecture (*Brain* 70:1, '47) on principles of nervous activity. A. R. Moritz and F. C. Henriques continue work on thermal injury (*Arch. Path.* 43:466, 489, '47). H. F. Adler and F. S. Grodins analyse abdominal symptoms at altitude (Proj. 493, Rep. 1, AAF Sch. Avia. Med., Randolph Field, Texas, 1947).

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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INTERNATIONAL COUNCIL OF NURSES' CONVENTION

The International Council of Nurses held in Atlantic City May 12-16 was attended by five nurses from Hawaii: Mollie K. Kirchgassner, Catherine Barry, Vincenta Fernandez and Michiko Kikugawa of Honolulu, and Kiyoko Yafuso of Hakalau, Hawaii.

Over 5,000 nurses from 32 nations were present as President Effie J. Taylor called to order the first post-war congress of the I.C.N. in Convention Hall, Atlantic City, N. J. Colorful flags of many countries flanked a portrait of Florence Nightingale by Fredrick Roscher, noted New Jersey artist, and the platform was gay with flowers and plants.

Commissioner Sanford Bates, Department of Institutions and Agencies of the State of New Jersey, welcomed the nurses to Atlantic City on behalf of Governor Alfred Driscoll.

Dr. G. Brock Chisholm, executive secretary of The World Health Organization, and Dr. Thomas Parran, Surgeon General, U. S. Public Health Service, emphasized the important role that nurses have to play in world health.

Dr. Chisholm stated, "In your session here, we hope you will make recommendations which will help and guide us in the broad international program we are undertaking. We are still foetal, the United Nations are the obstetricians of this new baby. We have a constitution signed by 63 nations which is internationally broader, and have a responsibility in the field of health greater than that ever given any international organization in the past. We invite and solicit your cooperation.

"It is estimated that 50 per cent of the patients who are ill today are stricken because of emotional disturbances. This was found true in the armed services and is true in civilian life. Perhaps the greatest role of the nurse is as a woman, the protecting person who will help persons who are ill from having to face up to reality too quickly. In this important adjustment the nurse can frequently help in a way that the doctor cannot hope to do. Yours is a profession of science, but to many patients you are valued for your qualities of heart and for your capacity to give peace, comfort and protection. It is important not to forget your function as comforters of suffering humanity."

Dr. Thomas Parran, Surgeon General, U. S. Public Health Service, stressed the importance of uniform training. "In the field of health," Dr. Parran declared, "nations are inter-dependent. The promotion of health in any nation is of value to all nations; just as low health standards and uncontrolled epidemics in any nation constitute a threat to other nations." He added that when every country contributes resources, public health in all countries should be greatly improved.

Dr. Parran pointed out that although international agreements on minimum standards for training health personnel "will not be legally binding," such agreements would give great impetus to the development of more uniform professional training." Dr. Parran stated that there is a great need for such standards because levels of nurse education vary greatly from country to country as well as from school to school in different countries.

"As I see it," Dr. Parran declared, "this is a period of reevaluation for nursing as it is for medicine. It is a rare opportunity to discard worn out ideas and restrictive traditions of the past and to salvage the best for the future."

He urged nurses of the 32 nations attending the Congress to start a course of action which will give new strength and vigor to the nursing pro-

fession every where. He reminded those present that "we can contribute that which we do best at home."

Dr. Edward L. Bortz, president elect of the American Medical Association, told the assembled nurses that this nation's 132,000 A.M.A. members are ready to support recommendations made by the nursing profession which "will improve the position of nurses in hospitals and in homes."

Other speakers included Dr. Louise Pearce, chairman, Committee on International Relations, American Association of University Women; Mrs. Mary Norton, Congresswoman from New Jersey; Dr. Robin C. Buerki, representing the American Hospital Association, and Col. George E. Armstrong, representing Major General Norman T. Kirk, Surgeon General U. S. Army.

Miss Effie Taylor, New Haven, Conn., retiring president of the I.C.N., brought out the true goal of nursing when she stated, "The highest objective of nursing is service, but to be sufficient and effective, it demands the highest type of preparation in the form of general and scientific knowledge, broad culture and experience."

Miss Gerda Höjer of Stockholm, Sweden, president of the Swedish Nurses Association, was elected president of the International Council of Nurses. Other officers include: 1st Vice President, Mary I. Lambie, director, Division of Nursing, New Zealand Health Department, Wellington, New Zealand; 2nd Vice President, Katherine J. Densford, president, American Nurses' Association, and Director, School of Nursing, University of Minnesota, Minneapolis; 3rd Vice President, Grace M. Fairley, formerly director of nurses, Vancouver General Hospital, Vancouver, B. C., Canada; and Treasurer, Miss G. E. Davies, London, England, formerly registrar, General Nursing Council for England and Wales.

The next Congress of the International Council of Nurses will take place in Sweden in 1949 and will mark the fiftieth anniversary of the founding of the I.C.N.

THE PROPOSED STRUCTURES OF ORGANIZED NURSING

VIRGINIA A. JONES, R.N., B.S., M.A.*

Six national nursing organizations have developed in an attempt to meet the needs of organized nursing. The National Organization for Public Health Nursing was organized because its objective—to develop adequate community nursing service—demands the participation of non-nurse leaders and specialists from other professions. The National Association for Colored Nurses was formed to give negro nurses the advantages of an organized approach to their problems which was not available to them because they were not eligible for membership in some of the constituent state organizations of the American Nurses' Association and therefore not able to become members of the A.N.A. The American Association of Industrial Nurses was started by one specialist group to afford more consideration of its particular field than is possible in the present structure of A.N.A. The National League of Nursing Education and the Association of Collegiate Schools of Nursing were considered necessary both because they serve specialty groups which desire non-nurse participation and because they desired a more direct approach to their individual members than is possible through state organizations. Soon a new group, concerned with a particular aspect of nursing care, the practical nurses and other nursing auxiliary workers will come into the picture.

To any one who has participated in the activities of these organizations it becomes obvious that there are of necessity overlapping and gaps in objectives, programs, memberships and achievements. Since this pattern has not met the needs satisfactorily, the question, which the nursing profession is now trying to find an answer to, is: What type of structure can best enable organized nursing to meet its objectives for the expanding future as well as for the present?

Three basic purposes of nursing have been defined by the National Nursing Council and are generally accepted by all nurses. They are:

1. To develop and enforce optimum standards in the recruitment, preparation and practice of the profession, its specialists and its auxiliaries.
2. To promote and protect the social and economic welfare of qualified nursing practitioners.
3. To make adequate qualified nursing service (professional, specialist and auxiliary), readily and economically available to care for all the individual and general health needs of the American people.

The Raymond Rich Associates have been engaged by the national nursing organizations to suggest a structure which will enable the nursing profession to meet these three major purposes. They have submitted plans for a national nursing association, of which all professional nurses, members of any of the six national nursing organizations, would become members. Eventually admission to membership would be through examinations in basic nursing or through graduation from schools accredited by the Association. Not

* President of Nurses' Association, Territory of Hawaii.

only would this enable nurses to make a unified approach to their problems, but, if accepted by the states, it would eventually result in national registration and licensure as well as national accreditation of schools. Each member would join a specialty group of her choice and become a voting member of that section. She would have the privilege of participating in the activities of the other specialty sections. Thus each specialty would have a sufficient degree of autonomy within the common national association.

The membership, through its House of Delegates, would provide for a group of recognized authorities representing each of the specialty sections. This group (called the National Academy of Nurses in the Rich report) would approve examinations for membership in the national association and pass on standards for accreditation of schools, specialist programs and training programs for auxiliary workers. It would encourage research in nursing, supervise technical periodicals, and sponsor a Conference of State Boards of Nurse Examiners and a Conference of Accredited Schools of Nursing. Each of these conferences would act as a clearing house for problems in its field.

To deal with the common problems of all nurses, whatever their specialty interests, the membership, through its House of Delegates, would establish commissions to study and make recommendations to the House of Delegates in each of the general problem areas of nursing such as, social and economic welfare of nurses, educational facilities, nursing and health, legislation, etc.

The administrative machinery to correlate and direct the work of these three groups and their committees would be a Board of Directors elected by the House of Delegates. The Board of Directors would be empowered to establish a National Nursing Center where the offices of the staff would be situated.

This whole recommended plan proposes a most radical change in the pattern of national organizations, especially that of the American Nurses' Association. One of the most controversial issues is the question of the place in it of the nursing auxiliaries, including practical nurses and non-nurse or lay groups. If nursing needs are to be met in one association these people must be a part of it. Plan I, recommended by the Rich report, provides for a single organization representing all of these interests, although it suggests that nursing auxiliaries be granted full participation only when the functions and standards of this group have been well defined. Plan II provides two organizations with a joint Board of Trustees and centralized service headquarters—one organization for professional nurses only, the other for non-professional nurse members.

The second controversial question is the provision recommended for local participation in the affairs of the national association, now provided by state, district and county associations. The Rich report suggests that the constituent bodies of the national association be district associations, each one as far as possible consisting of 500 to 2000 members. The district associations may form a state association to deal with their common intrastate problems. The present procedure of initiating membership in the district or county association will be reversed and membership in the national association will signify eligibility for membership in the district.

It is recognized by Rich Associates, who made the study and should be remembered by all nurses studying the report, that the suggested plan or any modification of it must necessarily be adapted in its details to meet varied situations. For instance, Hawaii (and some states), could not meet the membership number requirement for district associations and could not function other than on a territorial basis.

Cost has not been estimated. It is believed by Rich Associates that considerable sums would be realized in the merging of activities to eliminate overlapping expenditures, and in the possibilities of larger foundation grants and contributions and in larger subscription lists for periodicals, as a result of doubled, unified membership.

The Rich report ends: "But there are other more important costs that the new structure in its infancy will demand—patience, care, hard work, as well as willingness to adjust rapidly to new situations and a readiness to approach the problems of readjustment with tolerance and the will to find workable solutions. Is organized nursing willing to pay these other costs?"

THE JANE SERVICE MEMORIAL FUND

The Jane Service Library Fund, a memorial to Miss Jane Service, retired supervisor of Public Health Nurses on the island of Hawaii who died in the tidal wave disaster of April 1, 1946, has been started by the contribution of $50.00 from friends.

A plaque which is being made from Miss Service's training school pin will be placed in the library when completed. The local committee asks that contributions in the form of books on nurs-

ing and medicine be given in memory of Miss Service.

Persons wishing to contribute should contact Miss Roberta Lindberg, c/o Hilo Memorial Hospital, or Miss Jettie Jacobson, 1289 Waianuenue Avenue, Hilo, Hawaii.

AMERICAN RED CROSS NEWS LETTER

Revised Nurse Enrollment Plan Launched

The Central Committee of the American National Red Cross has approved a revised plan for the enrollment of Red Cross nurses designed to provide a medium through which nurses may participate in community volunteer activities through the American Red Cross.

Red Cross chapters will enroll nurses who are willing to be called upon for service in their local communities in time of disaster or to provide instruction in home nursing or for nurses' aides.

Under the new nurse enrollment plan it is the intention of the Red Cross to offer training institutes through which graduate nurses may supplement their professional training and prepare themselves to meet specific community needs.

Nursing organizations, nursing leaders, directors of hospital schools of nursing, and others who are to have a part in the new recruitment plan for Red Cross nurses will be furnished an outline of plans and procedures for enrollment as soon as they have been completed by the Red Cross Nursing Service.

Red Cross Nurses Invited to Apply for Return of Personnel Papers in Enrollment Files

In the process of adapting its nurse enrollment program to peacetime needs, the American Red Cross plans to reduce the materials in the national nurse enrollment and recruitment file.

Included in the national enrollment and recruitment files are a variety of papers that the enrolled nurses may wish to have preserved. These include, in many instances, confidential work references, school of nursing credentials, birth certificates or other evidences of citizenship, and other legal documents.

School of nursing credentials or other confidential work references cannot be released to the individual nurse, but may be turned over to any nurse placement agency or returned to the school of nursing. Other material that the nurses desire will be returned to them. The Red Cross is urging that nurses make prompt request for its return.

Requests for the return of material should be addressed to Ruth B. Freeman, Administrator, Nursing Services, American National Red Cross, Washington 13, D. C.

Historic material concerning the Red Cross Nurse Enrollment Service and the files of individuals prominent in general nursing and Red Cross nursing will be retained in the Red Cross archives.

Foreign Nurse Students on Red Cross Grants

Following the Congress of the International Council of Nurses held in Atlantic City, May 12-16, nine nurses identified with foreign Red Cross societies remained in the United States for study under grants made by the American National Red Cross.

Under the division of International Activities, Insular and Foreign Operations of the American Red Cross, Randi Juell and Esther Grimes of Norway will have one year each of scholarship study. Ludmilla Fantova, of Czechoslovakia, and Sigrid Larsson, of Finland, began their 6-months fellowship study on May 16. Also beginning study-visits immediately after the adjournment of the congress were Mrs. LeRoy d'Amigny, France; Jadwiga Suffczynska, Poland; Marta Mauks, Hungary; Blanca Marti, Colombia, and Hilda Lozier, Chile.

Other study-visitors to American National Red Cross are Ingrid Wyller, Norway, who is a Florence Nightingale Foundation student; Lydia Damasceno and Yara Miranda, Brazil, studying in the United States under the auspices of the Institute of Inter-American Affairs, and Consuelo Callejas, Spain, under auspices of the Spanish Red Cross.

THE TUBERCULOSIS PATIENT IS A PERSON

CHARLOTTE KERR, B.A., M.S., R.N.*

Who has tuberculosis? Anyone may have it—you, or the person who lives next door to you. Whoever it is, we must remember that he is a real individual with all the usual human emotions, aspirations and insecurities. He is a person with a past, a present and a future. He has a family in which he has a special place and special responsibilities. He may have diabetes, heart disease, or any of the other conditions that ordinary people have. He does not want to be tucked away in a bed, either at home or in the hospital, for a matter of months or years, with nothing to do but to look at the ceiling or at the face in the next bed.

* Director of Tuberculosis Nursing Education, Leahi Hospital, Honolulu, Hawaii.

A few people are glad to exchange their so-called "home" for a better life in a chronic disease hospital. Most people, however, have homes they like and in which they wish to live out the rest of their lives in peace. How far is it between the hospital and the home? When a patient enters a tuberculosis hospital, he is farther from home than the distance in miles. He is removed inexorably from active participation in the responsibilities, joys, satisfactions, security and troubles of those who make up his family. He is thrust into a strange atmosphere among unfamiliar faces in white uniforms (perhaps peering at him from behind a mask). He sees other new faces lying placidly on the pillows of the funny high beds, up and down the length of the ward. Food he doesn't like is put before him; incomprehensible and frightening words are spoken by the people in uniform; privacy has vanished out of his life. A new discipline is imposed upon him and his own habits, desires and ideas are not consulted. Home, in its deepest meaning, has receded quickly into the past and the future spreads out before him filled with uncertainty, fear, repression, frustration, loneliness.

The patient with tuberculosis has been shocked by his diagnosis and has seen the whole little world he has built up for himself torn away from under him. He is therefore tense, discouraged, depressed. He cannot settle down quietly and happily to a regime of REST, REST, REST, when his life is full of unsolved problems. Until he can rest, he cannot get well. Unless he can accept his diagnosis and cooperate with the doctors in their plan for treatment, he cannot conquer his disease.

What is the role of the nurse in this tragedy of tuberculosis? Her real job begins long before the patient even dreams that he is ill. She should take an active part in the entire program of tuberculosis control. This program, as stated by Dr. Herman Hilleboe,* embraces four principal phases:

1. Case-finding to discover all tuberculosis in an active stage.
2. Medical care and isolation of all tuberculous patients.
3. Aftercare and rehabilitation.
4. Protection of the tuberculous family against economic distress.

Nurses are involved in all four phases, but especially in the first three. Wherever they are employed, in public health, in industry, in schools, in offices, in hospitals, in clinics, they need to think of the entire problem. Health service to the patient must include a realization that the patient is an individual, that he is a member of a particular family and of a particular community group. There is direct interplay between his illness and all the other factors in his life. If these other factors are not considered, he may refuse treatment or he may sign out of the hospital and go home because of social stigma, fear, family troubles, emotional maladjustments, etc.

Another important factor to be kept in mind is the need for education of patients, families of patients, and the community as a whole. The educational process begins with the public health nurse, for it is she who has the closest and most consistent contact with all these groups. Her first job is the finding of cases, and potential cases, of active tuberculosis. When the diagnosis has been made, she has an important part to play in the interpretation to the patient and to his family of the meaning of the diagnosis and the program for treatment and cure. She must help him plan for hospitalization and see that arrangements are made for him and his family to have adequate financial support until he has been restored again to a wage-earning capacity. She needs to understand what it means to anyone to have tuberculosis strike him, so that she can help in the mental and emotional adjustments that must be made. She must interpret the importance of isolation in a tuberculosis hospital, both for purposes of treatment and also for the protection given the family and the community by having the infectious person removed from daily contact with others. She will train the patient and family in the essentials of home care until a hospital bed is available.

After the patient has been admitted to a hospital, the educational process at home continues. The maintenance of good health, provision for medical supervision, improvement in housing and sanitation, increased understanding of disease and many other health matters continue to be the responsibility of the public health nurse. She will work with other agencies to accomplish the desired end of helping the family readjust to the new situation and of preventing tuberculosis from spreading through the family.

Education of the patient in the hospital begins at the moment of admission. The hospital nurse takes up where the public health nurse left off. She should continue to interpret tuberculosis to the patient, to build up his confidence, to prepare him for treatment, to train him to protect others from his disease. She and the public health nurse together should act as a link between the hospital

* Hilleboe, H.: Rehabilitation and After Care in Tuberculosis, Pub. Health Rep., (Mar. 1) 1946.

and the home. Not all of this should be left to the social worker, for the social worker does not have an opportunity to know the patient as well as does the nurse who is with him so many more hours a day, nor does she understand so well the health implications in the situation. The nurse can help him to face reality and to prepare himself mentally for a new mode of living on a modified scale.

Tuberculosis patients in the hospital need the same quality and quantity of nursing care as is provided for patients in general hospitals. We should create for them an atmosphere of friendliness, hope and trust so that patients will have courage to face their new way of life and will have faith in the future. With patience and sincerity, the hospital nurse can help the patient to accept his physical limitations and guide him on the way to eventual rehabilitation.

Rehabilitation of the patient also begins at the time of admission to the hospital. This work is carried out by especially trained staffs in many hospitals. However, the nurse is always an important factor through the encouragement she gives to the patient, her supervision of his activity to be sure that it stays within prescribed limits, her commendation of work well done. From this he gains a sense of achievement and a plan for his future which put a new sparkle in his eyes. The aim of rehabilitation is to restore the patient to work—as completely as possible and as fast as is safe.

What are we working toward? We are trying to eradicate tuberculosis from our corner of the earth. The concerted efforts of all of us will do this. On our way to our goal, we need to think not only of the tubercle bacillus but also of the person who is acting as his temporary host. Emotional factors have been found to be the greatest cause of patients signing out against advice. Much of the responsibility for their maladjustments must rest on the shoulders of the nursing staff. Too many nurses do not stop to realize that every patient is a person! Each one should be studied as an individual and handled accordingly. This is sometimes difficult, but it is this very challenge that makes the nursing of tuberculosis patients really absorbing—indeed fascinating. We need both a thorough knowledge of tuberculosis and a real understanding of human relationships. Let us not forget our patient—the person who may be our neighbor, our friend, our fellow-worker, a member of our family, the girl on the next street. Who is our patient and how far away is he from home? Let us always think of our patient as a real person.

HOSPITAL NEWS

Kapiolani Maternity and Gynecological Hospital

Miss Gladys Francisco (Montrose General Hospital, Illinois) has been appointed acting director of nurses, following the resignation of Miss Alfhild Christopherson on July 3, 1947. Miss Francisco has been on the staff at Kapiolani Hospital for two years and has had post graduate work in obstetrics at Cook County Hospital, Illinois, and in Milwaukee, Wisconsin.

Nurses joining the staff in July were:

Miss Joyce Rieling (University of Kansas Hospital School of Nursing, Kansas City, Kansas).

Miss Carolee Day (University of Kansas Hospital School of Nursing, Kansas City, Kansas).

Miss Betty Lou McLain (University of Kansas Hospital School of Nursing, Kansas City, Kansas; B.S. University of Kansas).

Miss Dorothy Jean Campbell (University of Kansas Hospital School of Nursing, Kansas City, Kansas; B.S. University of Kansas).

Nurses leaving in July for extensive vacations on the mainland were Misses Jane Morita, Adele Mendonca, Lorna Chung, Margaret Law, and Mrs. Rowena Parson.

* * *

Leahi Hospital

Three students enrolled in the two months' tuberculosis nursing program for graduate nurses beginning July 1, 1947. They were:

Miss Myrna Campbell (Methodist Hospital, California), a former director of Red Cross Home Nursing, Territory of Hawaii.

Miss Myra Lam (Queen's Hospital School of Nursing, Hawaii), former public health nurse on the staff of Kapahulu Health Center, Hawaii.

Miss Willa Shell (College of Nursing and Health, University of Cincinnati, Ohio), former public health nurse on Kauai.

Leahi's graduate nurse staff education program is well under way. Dr. Hastings Walker, Medical Director, opened the first meeting on July 10 with a very interesting report of the Trudeau Society Meeting, with emphasis on the latest research findings in streptomycin therapy for tuberculosis. Dr. Walker attended the conference in San Francisco in June. Movies on tuberculosis, "Physical Diagnosis," "Pneumothorax," and "Lanakila" were shown at the second meeting. The nurses meet

two evenings a month, on hospital time, and visiting speakers have also been invited to participate.

New staff nurses are:

Miss Phyllis J. Latimer (Memorial Hospital School of Nursing, St. Thomas, Canada).

Miss Frances R. Mueller (Northwestern Hospital School of Nursing, Minnesota).

Miss Toshiko Takao (Columbia Hospital, Washington).

The National League of Nursing Education has sent word that the Territory of Hawaii League of Nursing Education will be formally accepted at the National Meeting to be held in Seattle, September 8 through 11.

* * *

Kuakini General Hospital

New appointments:

Misses Margaret Neiley and Frances Young, graduates of Vancouver General Hospital School of Nursing, British Columbia, have joined the nursing staff.

Mrs. A. Olson has been assistant director of nurses since April 15, 1947.

Miss Michiko Kikugawa is assistant supervisor of obstetrics after completing a post graduate course in obstetrics at Cornell Hospital, New York.

Resigned:

Mrs. Lorraine Phelps Conward, supervisor of operating room, was replaced temporarily by Miss Betty Brault.

Mrs. Elizabeth Milikin (Duke School of Nursing, North Carolina) resigned to accept an office nurse position.

Vacationers:

Miss Hatsue Chinen (Kuakini General Hospital), evening supervisor, spent one month on the Big Island.

Miss Nancy Horikawa (Queen's Hospital, Hawaii), night supervisor, visited family and friends on Kauai for one month.

Miss Marie Freeman (Frankford Hospital School of Nursing, Pennsylvania), pediatrics head nurse, took a short leave of absence to visit Kauai.

School news:

Miss Mary Hugo (St. Luke's Hospital, New York), Director of Nurses, visited Hawaii, Maui, Molokai, and Kauai in May to recruit students.

A recent addition to the curriculum is the three weeks' public health nursing affiliation with the local Health Department.

Alumnae news:

On August 2, the Alumnae Association held a semi-formal dance, its first big social affair, at the Mormon Temple Social Hall. The Association was organized in February 1947.

Miss Akiko Yano, president, and Miss Elsie Taketa are presently enrolled at Children's Hospital, Washington, D. C., in a six months' post graduate course in pediatrics.

Staff nurse, Kikue Inamura, was recently married to Isao Kimoto.

Mrs. Kimie Tomoyasu, supervisor of Central Supply, is on maternity leave.

Recent additions (males) to the cradle roll were made by Mrs. Dorothy Saito and Mrs. Utako Yogi.

New additions to the staff recently are:

Mrs. Winifred Marie La Londe (Mercy Hospital, Michigan).

Mrs. Hazel Takahashi (Queen's Hospital, Honolulu).

Mrs. Margetan Bourdan (Providence Hospital, Washington).

Mrs. Anne Verdie Loring (Providence Hospital, Washington).

Miss Mildred Kohatsu (Kuakini General Hospital).

Mrs. Elizabeth Kennedy (St. Mary of Nazareth, Chicago, Illinois), anesthetist.

Miss Florence Kawabe (St. Francis Hospital, Honolulu).

Mrs. Elsie Deakin (Lenox Hill Hospital, New York).

Mrs. Mabel Chor (Queen's Hospital, Honolulu) is relief night supervisor.

Mrs. Lillian Yamaguchi (Kuakini Hospital) is relief supervisor.

Mrs. Dorothy Hiraoka (Kuakini Hospital).

Mrs. Rachel Kokuta (Kuakini Hospital).

Recent departures were:

Miss Betty Brault, acting operating room supervisor.

Mrs. Darel Hatfield (Jeanne Thacker).

Mrs. M. C. Logan, clinical supervisor and health director, for a vacation on the mainland.

Mrs. Amy Dziegel, supervisor.

Miss Grace Gardner, record librarian.

Miss Mary Murai, chief dietitian.

Children's Hospital

Mrs. Ella Hand, superintendent of nurses, left for a three months' vacation on August 1 to visit her home in Des Moines, Iowa. Relieving Mrs. Hand was Mrs. Arlene Thompson (Buffalo City Hospital, now known as Meyer Memorial Hospital, New York). Mrs. Thompson, well known in our local nursing field, was formerly Educational Director at Children's Hospital.

Miss Mamie Murakami (Queen's Hospital School of Nursing, Honolulu, T. H.) left by clipper on August 12 to enroll in a post-graduate pediatric course at Cincinnati Children's Hospital, Ohio. She has been granted a scholarship by the Territorial Board of Health for a year's study. Staff at Children's Hospital honored Miss Murakami at a farewell tea at Waioli Tea Room, prior to her departure.

Children's Hospital has recently received approval for residency training in Pediatrics by the American Medical Association. With negotiations under way, the hospital hopes soon to bid Aloha to its new resident physicians.

* * *

St. Francis Hospital

The following new graduates were added to the staff recently:

Miss Lucille M. Buehner (Sioux Valley Hospital, South Dakota).

Miss Lillian Durant Dole (Waltham General Hospital, Massachusetts).

Miss Eunice J. Fors (Good Samaritan Training School for Nursing, Oregon).

Mrs. Martha K. Irish (St. Francis Hospital School of Nursing, Honolulu).

Miss Lillian Jurenka (Sacred Heart Hospital School of Nursing, Montana).

Miss Phyllis Kohler (St. Joseph's Hospital, Minnesota).

Miss Margaret Kuhrey, Sacred Heart Hospital School of Nursing, Montana).

Miss Florence Stevenson (Seattle General Hospital, Washington).

THE EDUCATIONAL VALUE OF AN OUT-PATIENT DEPARTMENT IN A HOSPITAL OPERATING A SCHOOL OF NURSING

(MRS.) MILDRED M. PINNER, R.N., M.S.*

The country needs 65,000 Public Health Nurses and at present there are 21,000. Clinic Nursing or Out-Patient Department is a specialty of Public Health Nursing. Often times the Out-Patient Department in a hospital furnishes the only opportunity for experience with the social and preventive aspects of nursing. To be good Public Health Nurses, our students need an insight into this specialty. Clinic nursing in a recognized School of Nursing offers this opportunity. When our Schools of Nursing were surveyed as a means of accreditation last fall, we were short of two services, public health nursing, and for several schools, psychiatric. With facilities available in our community should we fall short in our responsibilities to our students?

The Out-Patient Department is a form of community public health. The degree to which students have contact with the home and the other community agencies varies according to the facilities which the Out-Patient Department offers. This department offers educational opportunities for the student, not only to give her an idea of the conditions outside the hospital which affect patients, but also to enlarge her understanding of certain clinical aspects which the inservice program does not provide.

However, the Out-Patient Department is of value in this aspect only if there are well qualified nurses with experience in Public Health Nursing to teach the students the preventive, social and emotional aspects of illness they would not get in the wards. From such an experience our students should learn:

1. To understand symptoms and treatment of conditions not found in the in-patient service (skin clinic).
2. To understand family relationships and social and community situation which affect the patient's condition and his recovery.
3. To learn how to approach an individual and his family in order to help him accept and work out his own problems.
4. To gain some experience in teaching individuals or groups or both (dietary) (hygiene).
5. To learn how to use community resources for assistance in dealing with the problem of the patient and the family.

Fortunate are the Schools of Nursing which can offer to their students an enriched experience in ward and classroom, experience in the Out-Patient Department and also an affiliation in a Public Health Nursing Agency. Experience shows that there are many unused facilities in the community which may contribute constructively to the preparation of nurses who will participate in the health and social welfare programs of the country.

Nursing Education is a Progressive Process

The generally accepted method is to begin the *first stage* of teaching nursing and nursing practice in the routinized hospital situation when the

* Director of Nursing, St. Francis Hospital

patient is in bed under complete professional control and the student under direct supervision. The *second stage* is an advance to the care of the clinic patient who is up and out most of the time and far less easily controlled by the medical hospital personnel. The student is guided and supervised by qualified personnel. The *third stage* of the student's preparation gives her experience in nursing the sick in the homes. Here both the nurse and the patient are out of the hospital and clinic. This is a community aid (Visiting Nursing). In some programs the second and third stages are combined. This creates the problem of providing as constant and direct supervision in field or home as in clinic, or arranging experience late in the nursing school schedule when the student is about to graduate. This defeats our purpose for a well integrated program incorporating the preventive aspects of nursing.

The student spends two academic years learning the social as well as the physical and biological sciences and securing experience in the basic divisions working with the dietitians, laboratory and x-ray technicians, occupational therapist and physio-therapist. In the Out-Patient Department the student must become aware of her responsibilities as a hostess, nurse, doctor's assistant and teacher as well as to add to her observation of types of illness and treatments not seen in hospital wards. The student should think of the patient as a whole and be taught that she is responsible for case finding and case holding regardless of the location of the patient or her daily assignment.

The student at the end of her service should be able to improve her observations in formulating judgment and planning care; in practicing skills and assisting physicians. Students enjoy their Out-Patient Department experience. It aims at the individualization of service on the basis of need. This experience is aimed at producing a nurse aware of her responsibility for the preservation of health, and care of the sick regardless of whether she is serving in a hospital ward, clinic or patient's home. It is intended to give her nursing experience with people outside of the hospital. It allows her to observe what is going on in Public Health programs and it helps her to decide whether she wishes to be a Public Health Nurse or not.

In an Out-Patient Department, theory and practice are brought together. It is a challenge to a student as it offers the process of problem solving. The students' preparation is lacking in certain essential elements needed for modern family and community health work. To most doctors and nurses, prevention of disease, the teaching of hygiene, the upbuilding of family and community health are vague and visionary, are less dramatic and less practical than the rescue of an acutely ill patient. Few nurses until recently realized the real obligation to prepare nurses for other fields besides institutional and private duty.

The supervision of this department interprets the social-economic and public health aspects of illness to her students. Out-Patient Departments of hospitals are destined to offer more educational opportunities of two types—health education and prophylaxis. In hospitals patients are dressed alike; in an Out-Patient Department they are individual. It is a different matter to tell a mother with three children and a home to manage to apply hot wet compresses to a leg every four hours for twenty minutes than it is to carry out the same procedure in a hospital. This is a good learning situation for the student nurse.

Through an Out-Patient Department the hospital spreads its services to the community. It cooperates with other health agencies for the welfare of the patient and his family. The nurse becomes acquainted with the purposes and functioning of other agencies and together with other workers in the clinic helps to coordinate services to patients. It makes one feel a part of a large inclusive program. The nurse gets to learn people, see the patient in the homes, see problems as the patient does, to understand why they solve problems as they do and to develop such appreciation of their ways of thinking and living.

We see the family as a unit and as a functioning part of the community. The nurse sees the patient's problems from his perspective. With the expansion of medical services, to afford more and better medical care for a greater number of people, clinic facilities must be extended. Clinics have proved their value for teaching and research.

In the modernization of our local hospitals, we need modern services and complete services for our students. For an example: We can offer our nurses in the obstetrical division, experience in prenatal clinic, frequent follow-ups, the study of the patient during delivery, the mother and baby after delivery and the post-natal clinic and well baby clinic facilities. This is a complete picture of one aspect of teaching in a School of Nursing.

Hospitals are operated for the care of patients; Schools of Nursing for the education of students. These both serve the community. No patient is cured until he is completely adjusted in society. No nurse is educated until she has had the opportunity to experience all phases of nursing. Out-Patient experiences will help complete the teaching experience of the student so she will be better able to serve the community.



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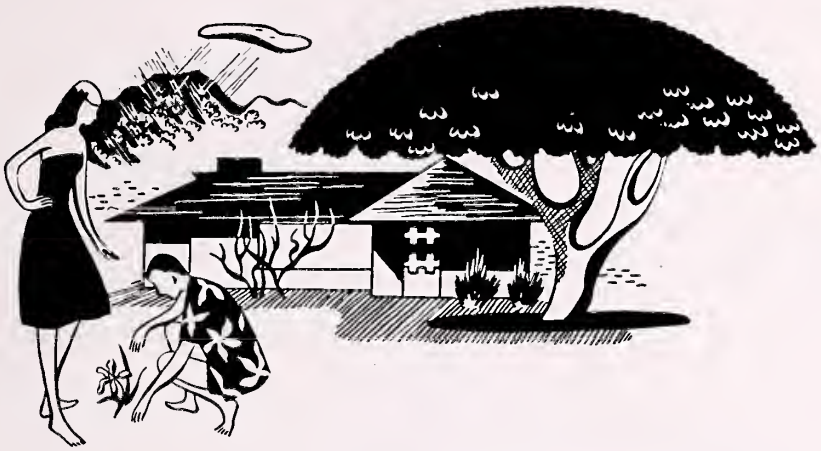
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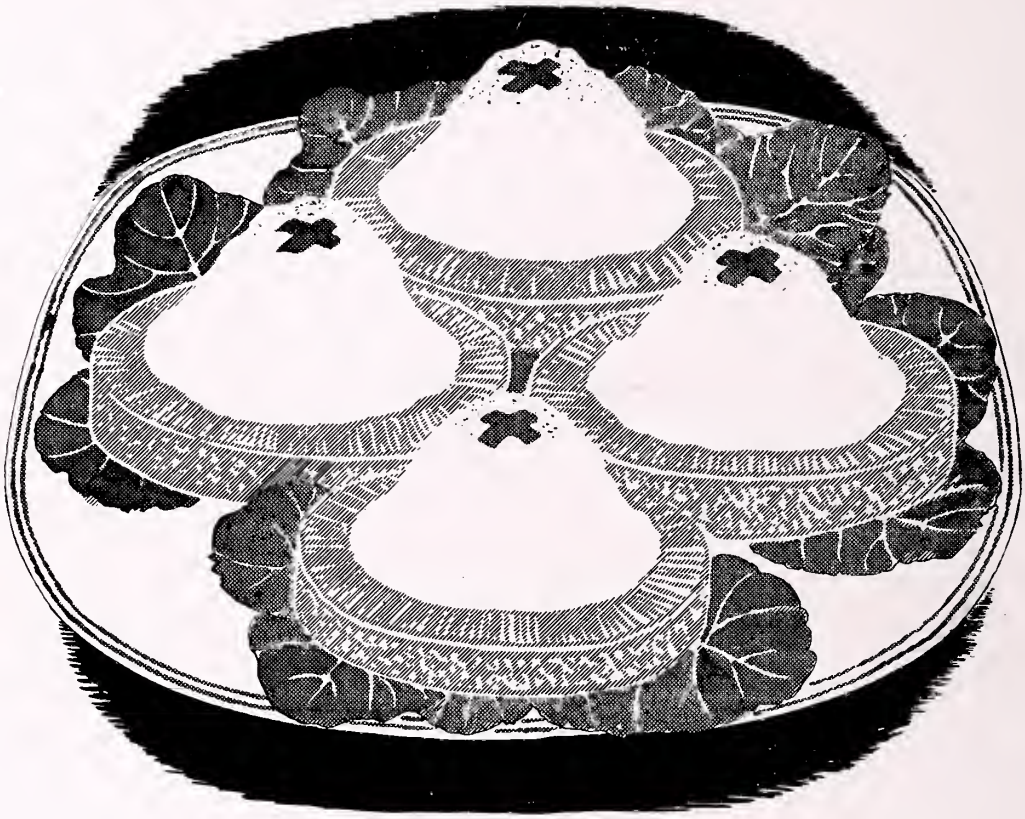
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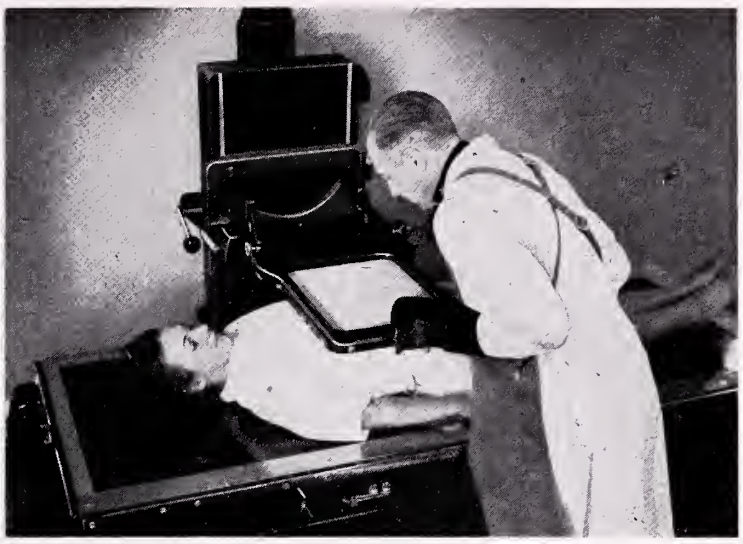
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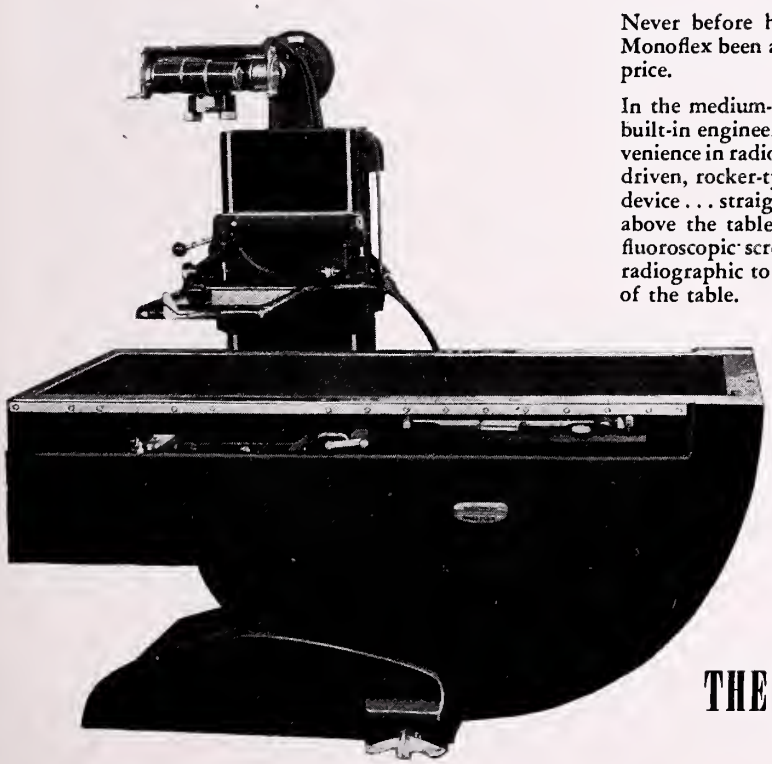




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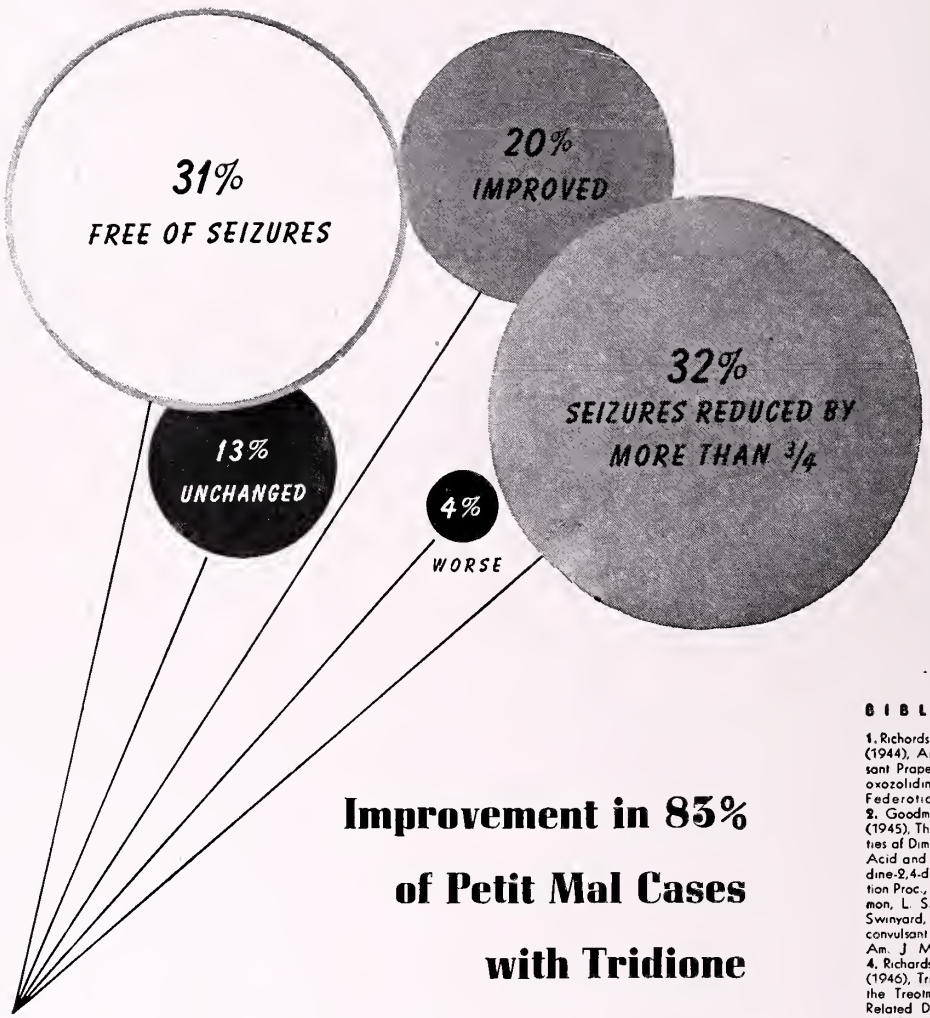
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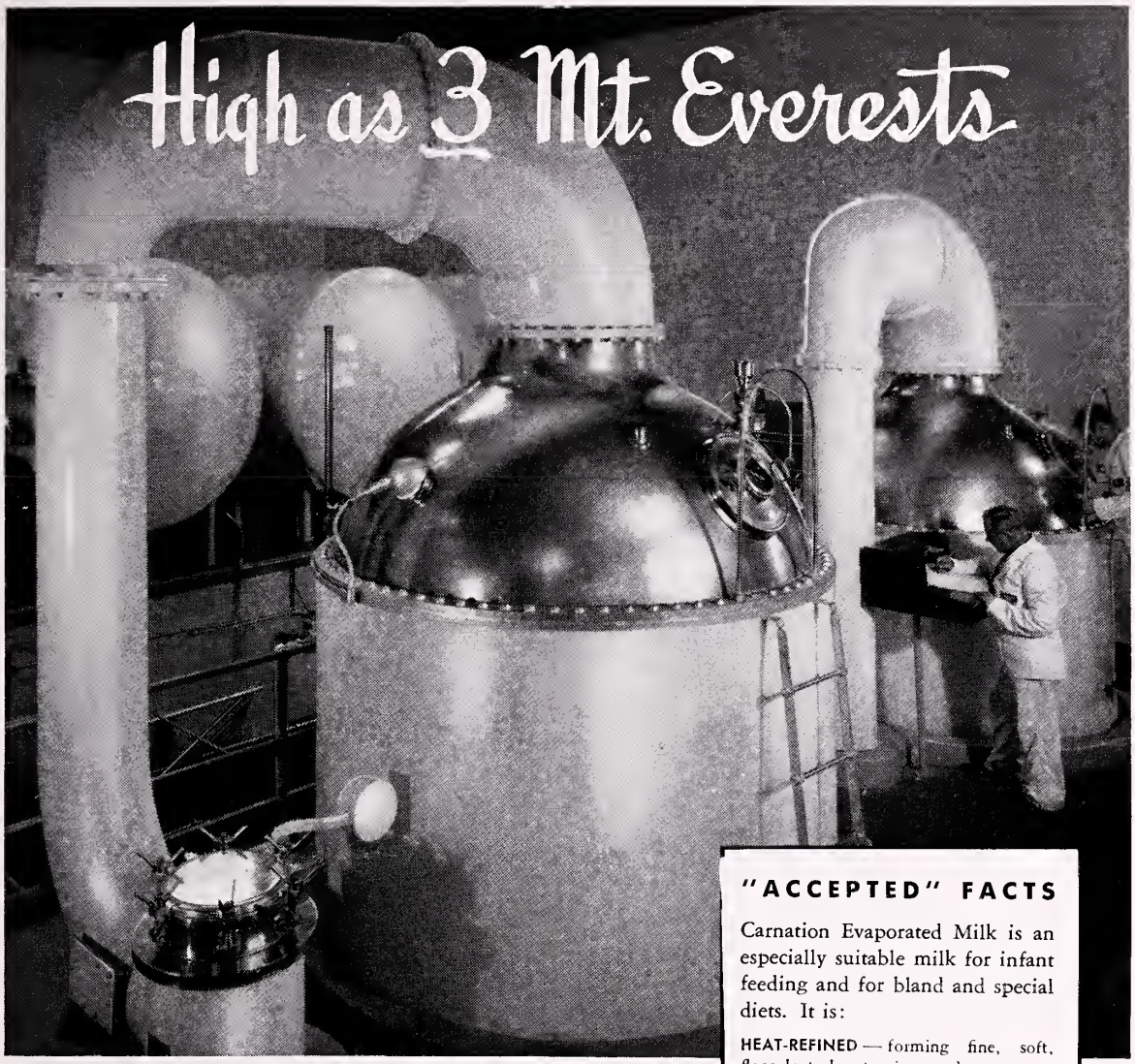
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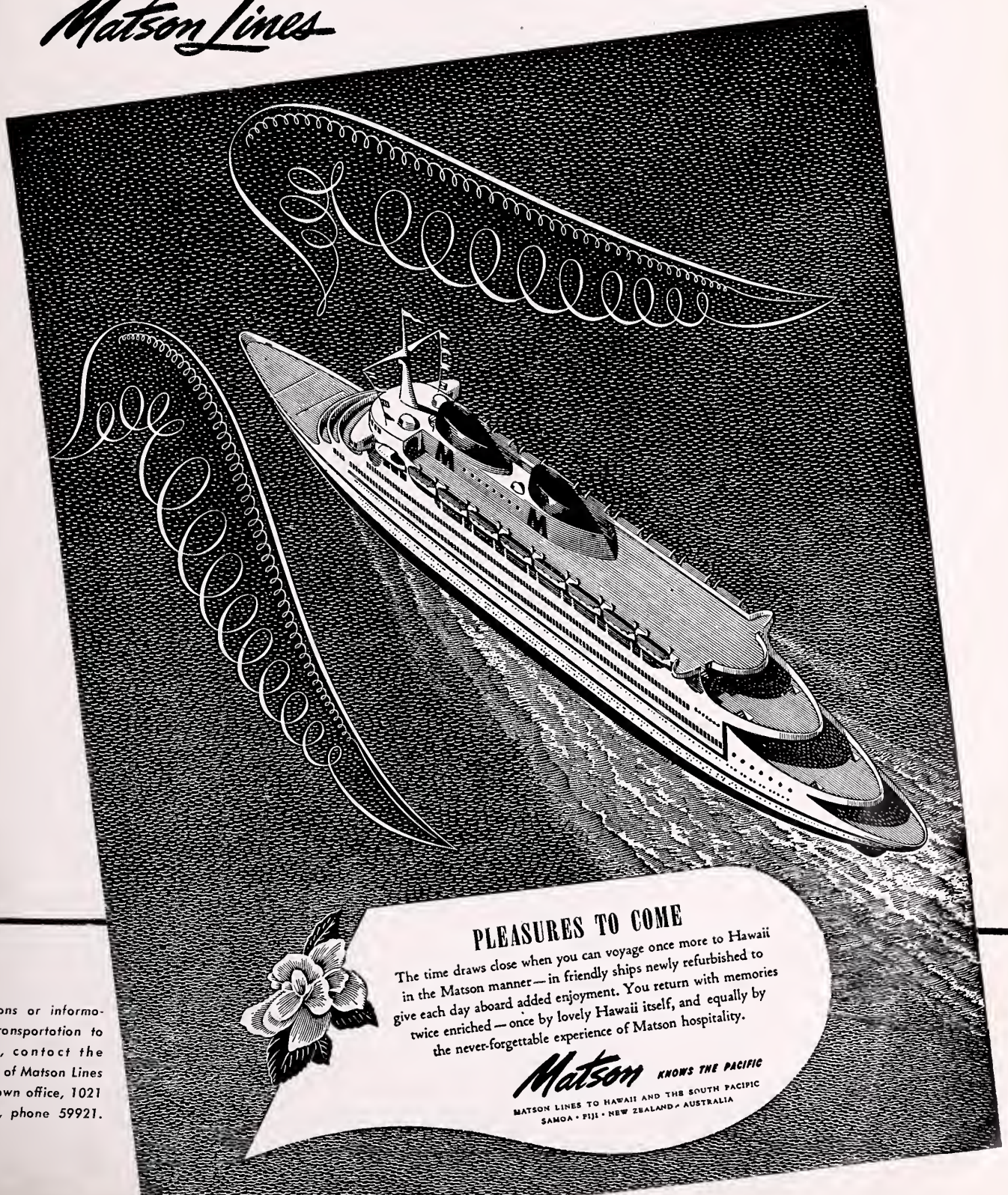
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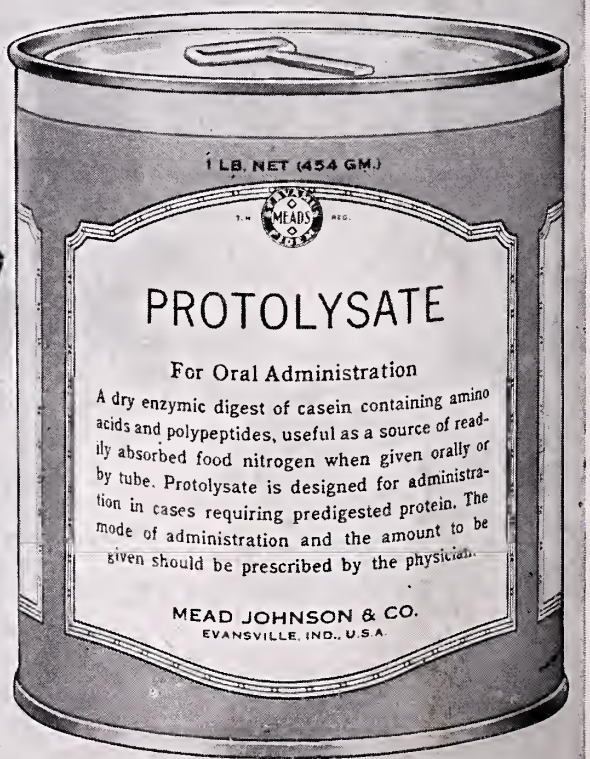
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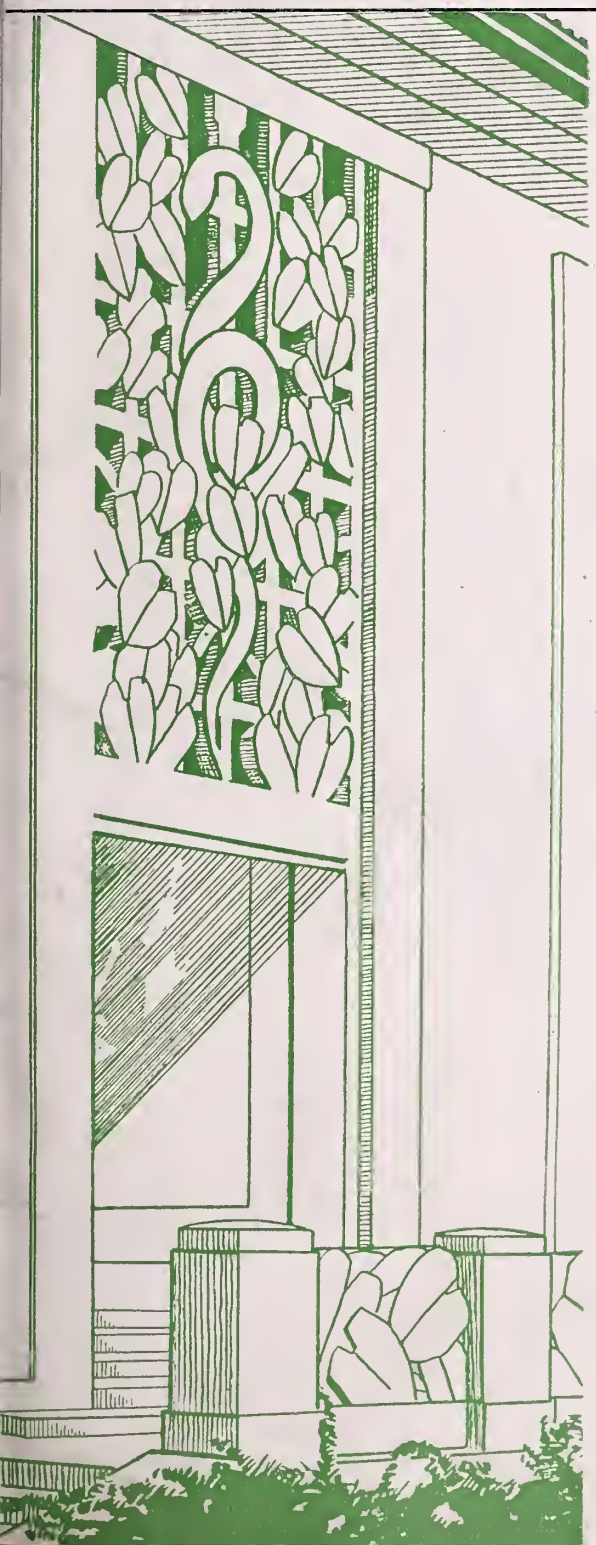
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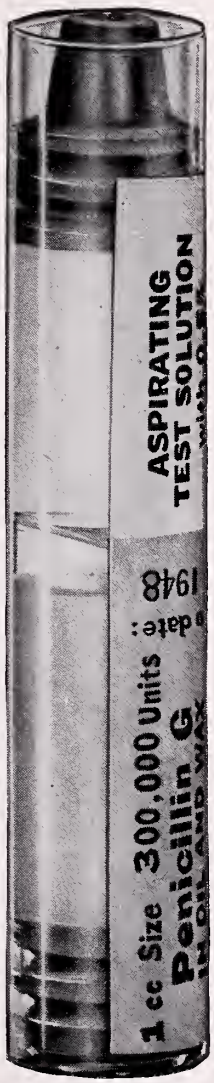
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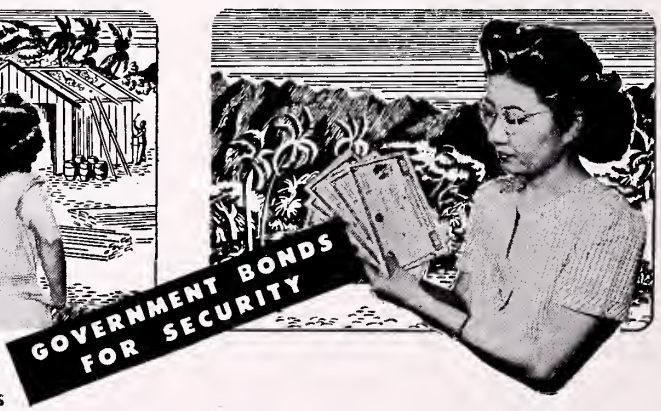
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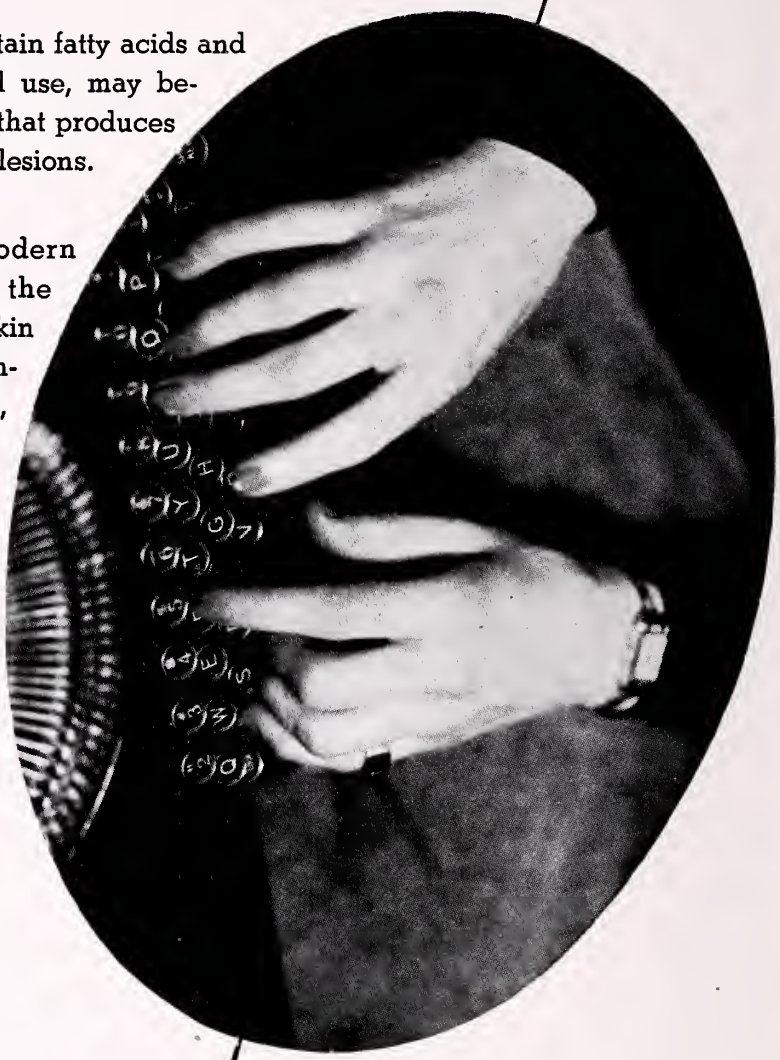
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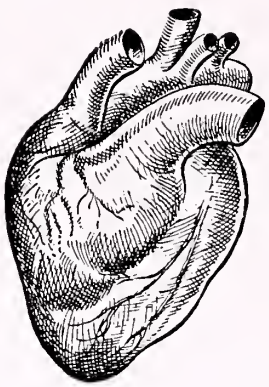
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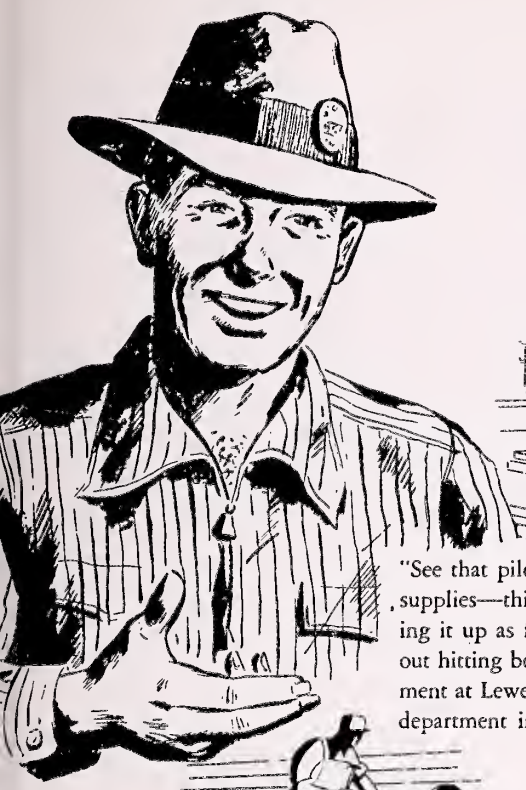
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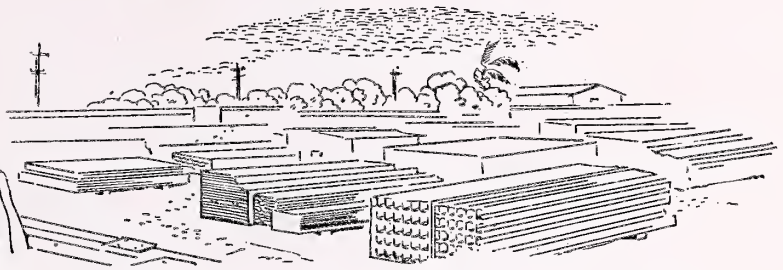
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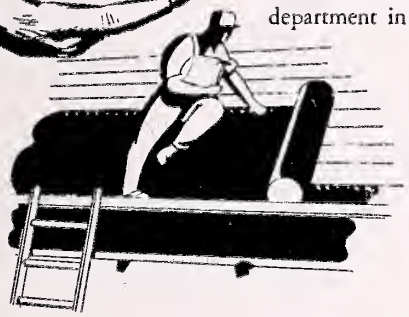
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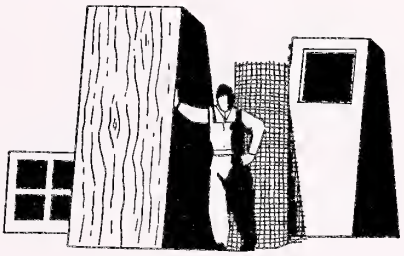
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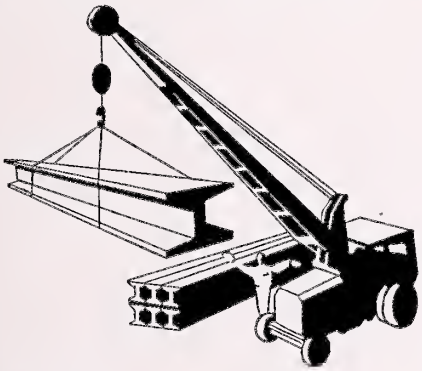
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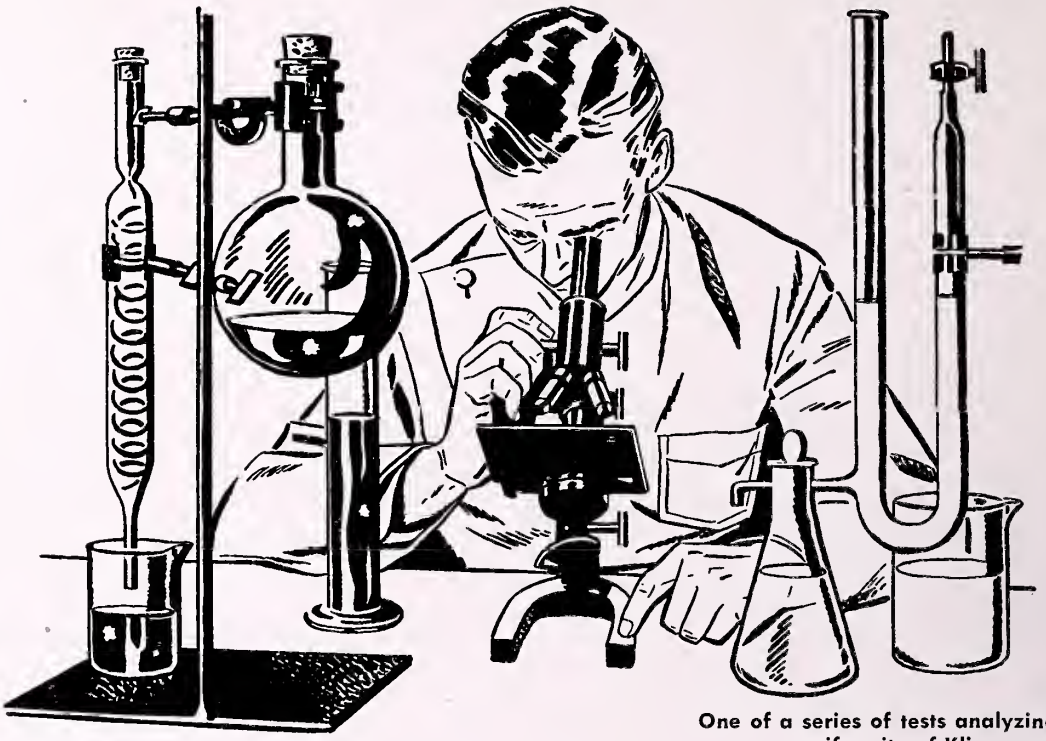
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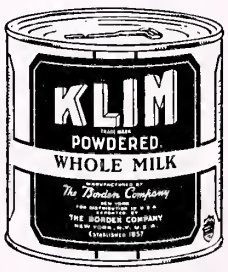
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Tumors of the Chest Lying Within or Adjacent to the Mediastinum

J. E. STRODE, M.D.
HONOLULU, T. H.

THE improved methods of procedure as applied to surgery in general and to lesions of the chest in particular have made surgery of the mediastinum a subject of ever-increasing interest, importance and safety. To recall briefly a few of the more recent advances, one might mention the contributions that have been made by Ladd, Gross, Blalock and others in the treatment of congenital heart lesions, the work of Beck in increasing circulation to the heart muscle in myocardial infarction, the work of Dragstedt on vagotomy in the treatment of peptic ulcers and of Blalock in the treatment of myasthenia gravis by removal of the thymus. Pericardiectomy for chronic constrictive heart disease, resection of the esophagus for carcinoma, removal of esophageal diverticula and extirpation of tumors involving various structures of the mediastinum are procedures that are of fairly common occurrence and are carried out with a minimum of mortality and frequently with marked amelioration of symptoms, if not a complete cure.

A discussion of some of the problems associated with the diagnosis and surgical treatment of tumors of the mediastinum and the presentation of a few clinical cases will, I hope, prove both interesting and informative.

Mediastinal tumors very frequently at the time of their discovery are producing no signs or symptoms and are accidentally found during the course of an x-ray examination for some other existing or suspected condition. Signs and symptoms when produced may be classified as general, such as pain, cough, dyspnea and cyanosis; or special or localizing. The latter may occur when the tumor encroaches on some adjacent structure such as blood vessels, nerves, esophagus, trachea, etc. As an example one might mention the coughing up of hair, the result of a dermoid cyst rupturing into the bronchus; the production of Horner's syndrome, the result of pressure on the cervico-thoracic sympathetics; or the signs of passive congestion associated with constriction of the superior vena cava.

Physical examination of an individual with a mediastinal tumor may be and frequently is entirely negative, depending upon the size of the tumor and its relationship to surrounding structures. X-ray and fluoroscopic examination are the methods of investigation that are all-important. By these means the presence of the tumor is determined, its location, its character, whether well circumscribed or diffuse, whether or not it pulsates, whether or not it contains bone or teeth, and the best method of surgical approach. The response of the lesion to controlled doses of x-ray irradiation may aid in determining whether or not it is malignant and whether or not it should be approached surgically.

Tumors of the mediastinum may be composed of ecto-, meso- or endo-derm or a combination of all three germ layers, so that tumors that are encountered elsewhere in the body may be found here. However, certain tumors are more frequently found, and are more common in certain locations. Dermoids or teratomas usually occur in the anterior superior mediastinum, while neoplasms arising from nerve tissue, such as neurofibromas and ganglioneuromas, occur more often in the posterior mediastinum. Ganglioneuromas may be partially in the spinal canal and partially in the mediastinum, producing so-called dumbbell or hour-glass tumors. They may be alongside but not in the mediastinum. Enteric cysts, arising supposedly from cell rests of the primitive gut, and cysts representing remnants of the respiratory system, are usually found in the lower posterior mediastinum. Lipomas, fibromas, xanthomas, chondromas, lymphomas, etc., as well as all types of metastatic lesions, may be encountered. The possibility that the tumor may be enlarged lymph nodes resulting from Hodgkin's disease, lymphatic leukemia, tuberculosis or simple inflammation must be borne in mind, and an attempt at differential diagnosis made, since the type of therapy varies with the type of lesion. As we all appreciate, a correct diagnosis may be extremely difficult and at times impossible to make without exploratory operation.

Case Reports

CASE 1.—A Korean housewife, 24 years of age, was seen because of substernal pain and pain in the right side of the chest of four months' duration. Physical examination and x-ray studies showed a mass in the upper right anterior mediastinum (Fig. 1). Over a four months' period of observation the tumor increased in size but maintained its well circumscribed appearance.

Read before the 57th Annual Meeting of the Hawaii Territorial Medical Association, Lihue, Kauai, May 3, 1947.

Artificial pneumothorax was instituted as a preliminary step in order (1) to study better the relationship of the tumor to the lung and other thoracic organs, (2) to produce gradual reduction in lung volume, and (3) to test the fixity of mediastinal structures. In addition, the tumor was observed by the thoracoscope. From these observations, we concluded that the lesion was probably benign, and, though it pulsated, we believed that this was transmitted rather than expansile pulsation.

On February 18, 1937, the tumor was removed by an anterior approach. Subsequent examination showed the lesion to be a teratoma without evidence of malignancy. Microscopically, gastric mucosa, hair follicles, sebaceous glands, cartilage, connective tissue, fat and cells arising from the thymus were identified. The patient made an uneventful recovery and has since remained well.

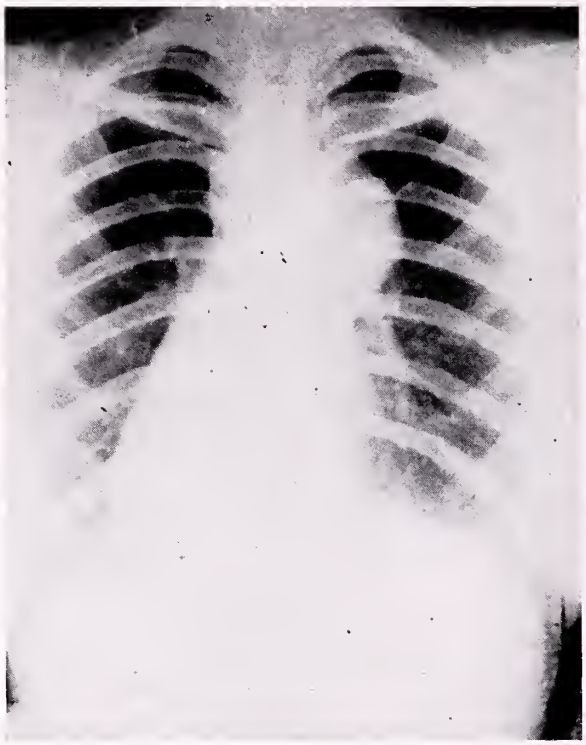


Fig. 1 (Case 1).—Tumor of right superior-anterior mediastinum. Teratoma.

Comment

The production of pneumothorax preceding thoracotomy for the removal of mediastinal tumors or for resection of the lung is not a routine procedure with us, but as with thoracoscopy, it is useful in selected cases.

Case 2.—A Japanese man, age 42, had been admitted to Leahi Hospital with a diagnosis of minimal pulmonary tuberculosis. In the chest roentgenogram a tumor was seen in the upper posterior part of the chest which was thought to be in the mediastinum (Fig. 2). The patient had no symptoms from this lesion. Due to its well circumscribed borders, it was thought to be a benign lesion, probably arising from nerve tissue. At the time of its removal on February 22, 1945, the tumor (Fig. 3) was found to lie in the vertebral gutter alongside, but just outside of, the mediastinal pleura. It was shelled out without difficulty. The patient made an uneventful recovery and has had no evidence of subsequent trouble referable to this condition. Microscopic study showed the picture of a benign neurofibroma.

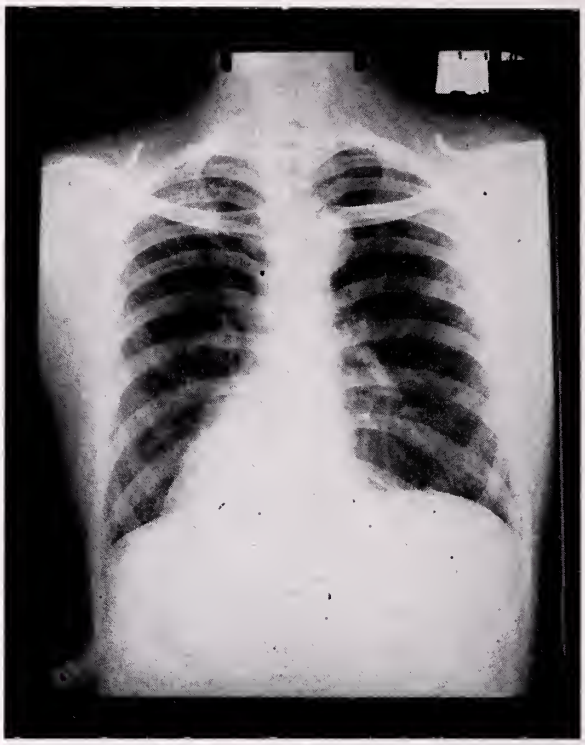


Fig. 2 (Case 2).—Tumor alongside right superior-posterior mediastinum. Neurofibroma.



Fig. 3 (Case 2).—Photograph of tumor.

Case 3.—A Portuguese housewife, age 26, was referred by Dr. Dunn of Maui, in April, 1946, with the diagnosis of a superior mediastinal tumor (Fig. 4). For the past two years she had complained of a dry cough without expectoration, and of pain, at times quite severe, in the left side of the chest. Barium x-ray studies of the

esophagus and fluoroscopic examination of the tumor did not suggest aneurysm and serological tests for syphilis were negative. An enlarged lymph node just above the left clavicle was removed for microscopic study but proved to be negative.

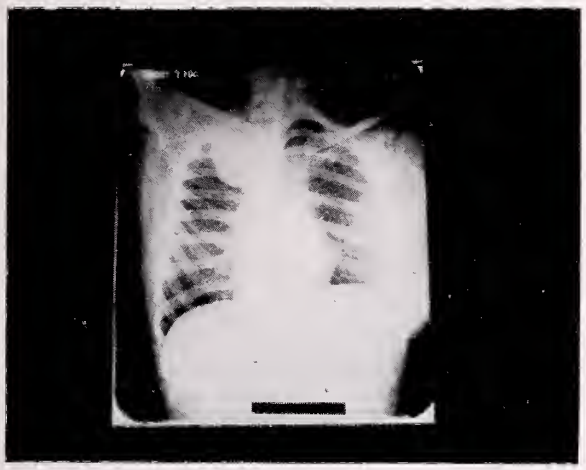


Fig. 4 (Case 3).—Tumor in left superior mediastinum. Benign lymphoma.



Fig. 5 (Case 3).—Photograph of tumor.

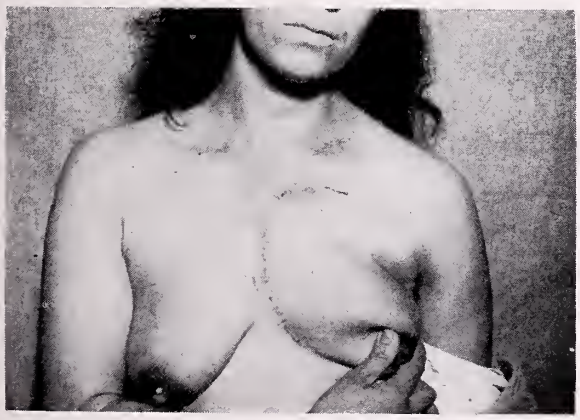


Fig. 6 (Case 3).—Showing incision of anterior operation.

On April 16, 1946, through an anterior approach, the tumor was removed (Fig. 6). It was found to occupy the upper mediastinum and to have grown into the intercostal spaces, though it was well encapsulated. The tumor (Fig. 5) was lying high in the chest; it was rather large; and it was removed with considerable difficulty. To gain more room in the operative field, the clavicle was disarticulated from the sternum. The patient made an uneventful recovery. Microscopic examination of the tumor showed it to be a benign lymphoma.

CASE 4.—A Chinese man, age 33, was referred by Dr. H. Q. Pang on February 28, 1946, with the diagnosis of probable tumor of the mediastinum. The patient had been well until three weeks previously when he developed what was thought to be influenza. This was asso-

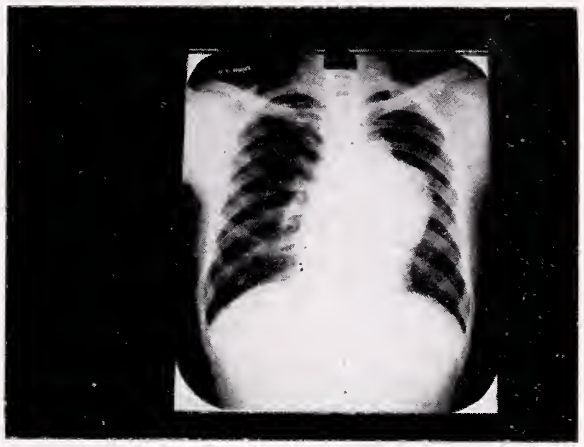


Fig. 7 (Case 4).—Tumor in left mid-mediastinum. Benign endothelioma probably arising from aortic body.

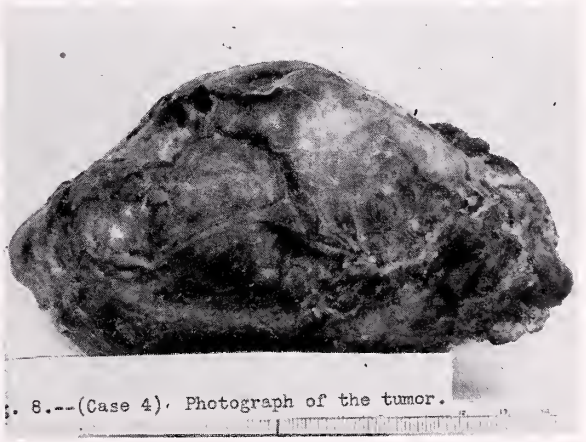


Fig. 8 (Case 4).—Photograph of the tumor.

ciated with fever, cough, some bloody expectoration, and loss of weight and strength. X-ray study showed a large tumor in or alongside the mid-portion of the mediastinum on the left (Fig. 7). Due to the short duration of symptoms, the rapid loss of weight, and the size of the tumor, we suspected that the lesion was malignant, possibly a lymphosarcoma. No evidence could be elicited to suggest that this was a metastatic lesion. Under the circumstances, it seemed advisable to try irradiation therapy. This was done but no change in the tumor occurred.

At operation on March 21, 1946, a tumor the size and shape of an average sized avocado pear was found (Fig. 8), lying in front of the hilus of the lung, attached to the pericardium below, and to the side of the aorta above. It appeared to be well encapsulated and had the gross characteristics of benignancy though it was removed with considerable difficulty due to the firm adhesions between the tumor and the surrounding vital structures. So far as could be told, the tumor was lying within the mediastinum, and the microscopic diagnosis would seem to bear this out.

Dr. Sumner Price was of the opinion that the tumor was an endothelioma, probably benign, and probably arising from an aortic body. Dr. Irvin L. Tilden, on the other hand, was reasonably convinced that the neoplasm arose from the thymus and was of low malignancy. This is illustrative of the fact that it is frequently difficult or impossible to be sure from what structure these tumors have arisen.

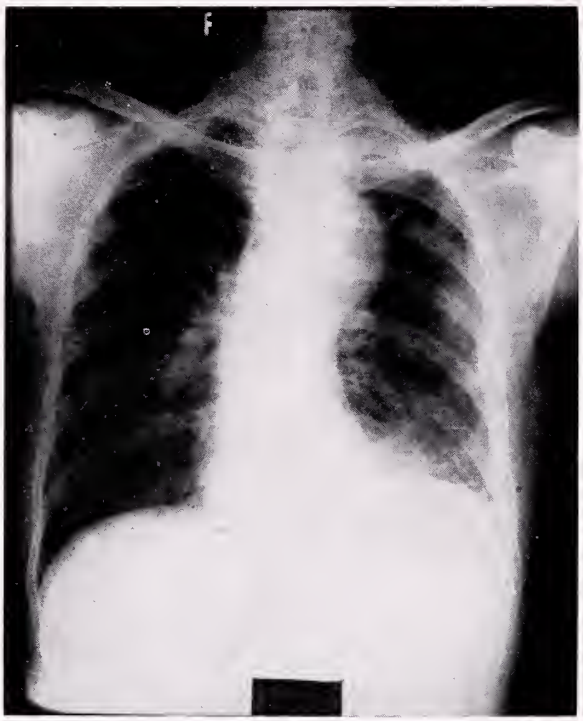


Fig. 9 (Case 5).—Tumor in left posterior-superior mediastinum. Primary anaplastic carcinoma.

This patient developed a postoperative hemorrhage and was operated upon again because of mediastinal compression, but died on the ninth postoperative day.

CASE 5.—A Caucasian man, age 57, was referred by Dr. Devereux with the diagnosis of probable mediastinal tumor.

In July, 1945, following what was thought to be influenza, the patient developed general malaise and lethargy, fever of 99° to 102° F., cough, profuse sweating and loss of weight. Between this date and seven months later, when the lesion was explored, he was hospitalized repeatedly and was subjected to practically all known types of investigation that might throw light on the cause of symptoms above enumerated. Three different hospital discharge diagnoses read, "Fever and secondary anemia of undetermined origin." X-rays of the chest in the early course of the disease were negative but gradually an increasing shadow on the left in the region of the arch of the aorta drew attention to this area as a probable source of the patient's symptoms (Fig. 9).

The picture was confused by the fact that the patient had been treated since the age of 6 for what had been diagnosed as tuberculosis of the hip. One consultant was quite sure that the chest lesion was an aneurysm; others that it was a tuberculous abscess. It seemed that symptoms could best be explained on the basis of an infected cyst since the shadow continued to enlarge despite therapeutic irradiation and was associated with fever, sweats and leucocytosis. Thorough investigation had failed to suggest that the mediastinal shadow was a metastatic lesion.

At exploration on February 4, 1946, through a posterior extrapleural approach, a broken-down infiltrating mass lying alongside the arch of the aorta was found. Grossly this lesion appeared to be malignant and microscopic study revealed anaplastic carcinoma. At autopsy several months later the lesion was thought to be primary in the mediastinum, since no involvement elsewhere could be found.

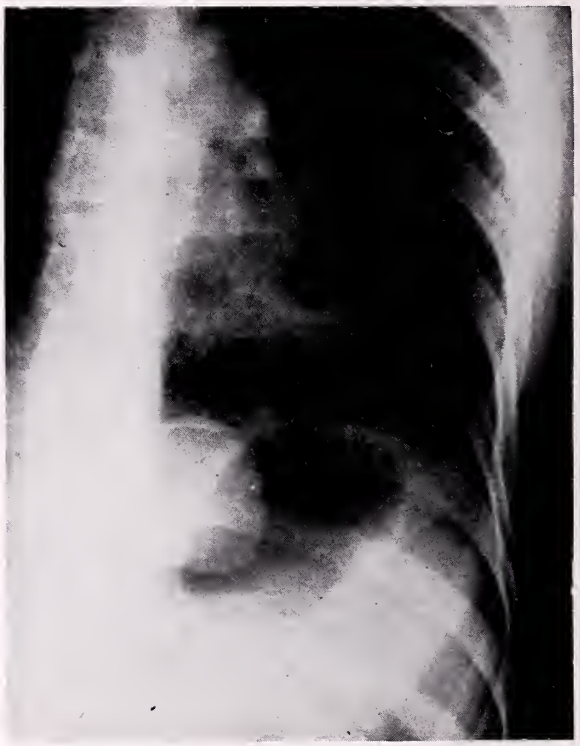


Fig. 10 (Case 6).—Tumor in left lower posterior mediastinum. Benign cyst lined with columnar epithelium, probably from lung bud.

Comment

From the smooth, circumscribed outline of the tumor as shown by the x-ray (Fig. 9), one would have expected the lesion to be benign. No doubt the mediastinal pleura was responsible for maintaining this appearance, and if complete visualization of the tumor could have been obtained its invasive nature probably would have been evident.

CASE 6.—A Caucasian woman, age 45, was accidentally found on x-ray examination to have a shadow in the left side of the chest, occupying the region of the posterior inferior mediastinum (Fig. 10). She was asymptomatic as regards this lesion. However, she was advised to have the tumor removed because of the possibility of its causing trouble. I was asked by Dr. R. O. Brown to assist with the operation.

At operation on May 14, 1940, the tumor was found to be a cyst arising in the posterior inferior mediastinal area. It was removed without difficulty. The patient made an uneventful recovery and has had no further trouble in this region. Microscopically, the tumor was found to be a cyst lined with columnar epithelium, with circular and longitudinal muscle layers characteristic of the gastrointestinal tract.

CASE 7.—A Hawaiian woman, age 46, was admitted to The Queen's Hospital on September 2, 1943, with the diagnosis of left upper lobar pneumonia. The temperature was 102° F.; the white count was 30,000, with 97 per cent polymorphonuclear leucocytes; and x-ray showed clouding of the left upper lobe. The temperature fell by crisis to normal on the eighth day of illness and remained normal. During the hospital stay of twenty-eight days, the patient complained of severe pain in the chest, particularly in the region of the left shoulder. The pain had awakened her out of sleep, and had been the first sign of illness before admission to the hospital. The pain had improved by the time of discharge but never entirely subsided. On March 1, 1944, she consulted Dr. Hartwell because of severe pain in the left shoulder which radiated both anteriorly and posteriorly.

X-ray of the chest at this time showed a large space-taking lesion on the left side in the paravertebral region (Fig. 11), extending from the third to the seventh rib, the precise nature of which could not be determined. It was thought to represent either an aneurysm of the descending aorta or a neoplasm, benign or malignant, probably arising in the mediastinum.

General physical examination was negative for a primary malignant lesion elsewhere, and serologic tests for syphilis were negative. Examination of the spinal fluid showed 910 mg. of protein per 100 cc.; it was otherwise normal. Though the patient had no abnormal neurological findings, we suspected that we were dealing with a lesion involving both the mediastinum and spinal canal.

At operation on March 14, 1944, an inflammatory mass was found lying alongside and adherent to the mediastinum, apparently arising in the upper lobe of the lung. The mass was resected and subsequent study showed it to consist of atelectatic fibrotic lung.

The patient made a good recovery and has remained free of the previous chest pain.

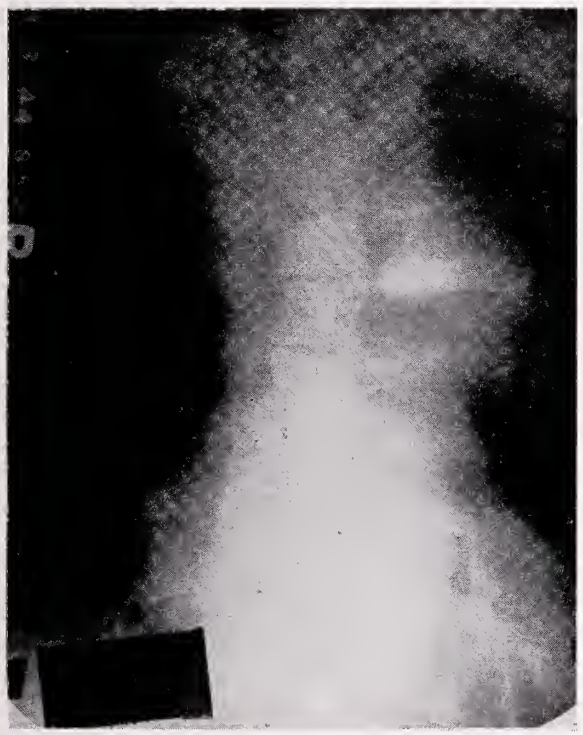


Fig. 11 (Case 7).—Tumor alongside left upper mediastinum. Atelectatic fibrotic lung.

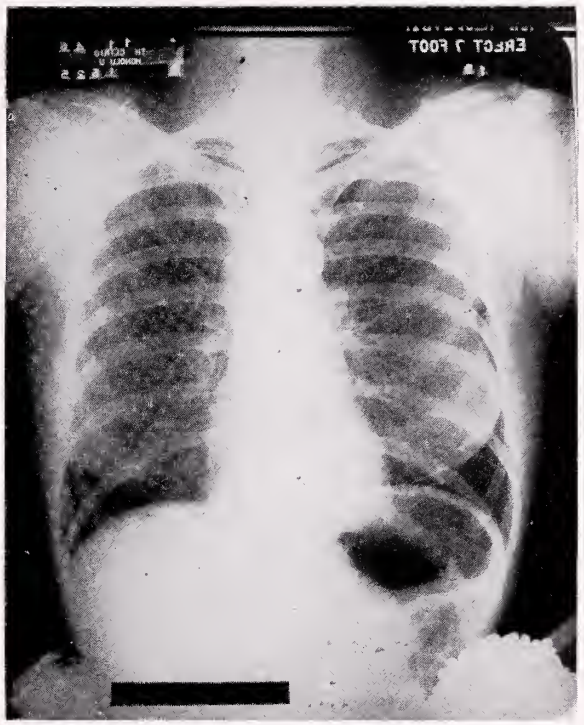


Fig. 12 (Case 8).—Tumor right upper posterior mediastinum causing superior vena cava obstruction. Fibrosing carcinoma.

CASE 8.—A Caucasian woman, age 45, a patient of Dr. H. L. Arnold, Sr., was first seen on March 11, 1946, complaining of pain in the right shoulder region and in the chest on the right side when breathing deeply. The pain had been present for three months. Edema of the eyelids had been noticed especially when arising, for the past six weeks. Rapidly spreading patches of dilated veins on the upper abdomen and chest had been seen for the past month (Fig. 12). Pressure over the emptied external jugular veins showed them to fill from below. Venous pressure was 225 mm. of water in the right arm and 235 in the left (about twice normal) with the patient recumbent. Using calcium gluconate, the circulation time from arms to head on the right was 18.5 sec-

onds, and on the left, 14 seconds. Blood pressure was 120/80 in each arm.

An attempt to visualize the innominate veins and superior vena cava by injection of diodrast was unsuccessful. However, the veins proximal to this area were visualized and showed no obstruction.



Fig. 13 (Case 8).—Photograph of patient showing clusters of dilated veins.



Fig. 14 (Case 8).—Photograph showing anterior approach.

Examination of the eye grounds showed full-size main stem veins and mild angiospastic changes. There were no other significant findings. X-ray and fluoroscopic examination of the chest revealed an abnormal shadow in the right upper anterior part of the mediastinum (Fig. 13).

From the foregoing findings, Dr. Arnold concluded that the patient was suffering from obstruction to the superior vena cava, probably from a tumor, and that exploration of this area was advisable (Fig. 14). This was done on March 22, 1946. A very hard neoplastic mass was encountered, occupying the region just posterior to the superior vena cava and extending up alongside the right innominate vein. It soon became evident that the tumor was invasive in nature and could not be removed in its entirety. As much of the mass as could be resected safely was removed and this was examined by frozen section. The diagnosis was fibrosing carcinoma.



Fig. 15 (Case 9).—Anteroposterior x-ray of chest showing tumor.

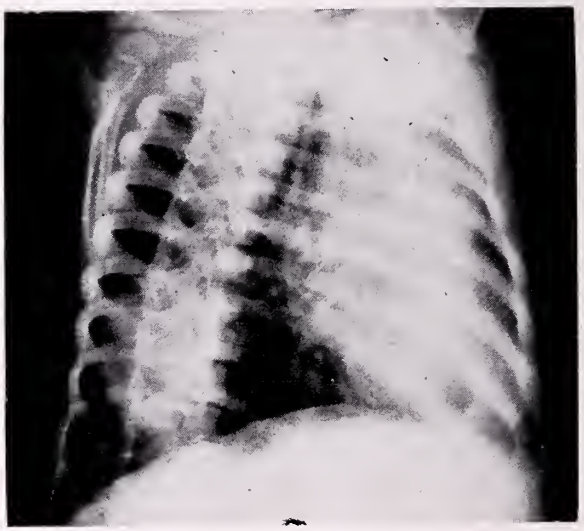


Fig. 16 (Case 9).—Lateral x-ray of chest showing tumor.

Following operation, the patient made a good recovery and the signs of caval obstruction cleared up. She was given a course of deep x-ray therapy and soon thereafter departed for the mainland. A recent communication stated that she is still enjoying good health, nine months postoperatively.

Just what structure gave rise to this malignancy is impossible to say. The upper lobe of the lung was adherent to the side of the mediastinum at the site of the tumor but did not seem to be a part of it.

CASE 9.—A Caucasian baby boy, 17 months old, a patient of Dr. Devereux, was accidentally found to have a tumor in the lower part of the right side of the chest, when an x-ray was made in an attempt to differentiate between what was suspected as being a behavior problem from an organic lesion (Figs. 15 and 16).

By x-ray and fluoroscopic examination, a well circumscribed tumor was found which was thought to arise within, or to lie alongside of, the lower right posterior mediastinum. So far as could be told, this lesion was not producing symptoms. Operation was advised, to forestall future complications that might arise if the tumor was left *in situ*.

At operation on October 7, 1946, through a thoracotomy incision, removing the posterior two-thirds of the



Fig. 17 (Case 9).—Photograph of tumor.

eighth rib, the tumor (Fig. 17), was found to lie in the vertebral sulcus, entirely outside of the mediastinum and behind the pleura. It was well circumscribed and was shelled out without difficulty. The denuded area was partially closed over by pleura previously overlying the tumor.

Examination of the tumor showed it to be cystic and lined with columnar epithelium with inner circular and outer longitudinal muscular layers characteristic of the alimentary tract.

The patient made an uneventful recovery.

CASE 10.—A Chinese woman, age 21, was referred by Dr. Mitchell with the diagnosis of a tumor occupying the upper left chest, probably in the mediastinum (Fig. 18). The patient was without symptoms of any kind, no cough or pain had occurred, and no Horner's syndrome was present. X-ray study showed the lesion to occupy the posterior part of the apex of the chest. It did not pulsate and due to its location we surmised that it was probably a tumor arising from nerve tissue. At operation on October 28, 1946, through a posterior lateral approach resecting the fourth rib (Fig. 19), the tumor was found to be lying alongside the vertebral gutter, partially in the posterior superior mediastinum and partially in the chest cavity proper. The cervicothoracic sympathetic chain ran through and appeared to be a part of the tumor (Fig. 20). It was shelled out without difficulty. The microscopic picture showed the tumor to be a ganglioneuroma.

On the fourth postoperative day the patient developed wheezing respiration with coarse rales in both sides of the chest. X-ray showed fluid and air in the left side of the chest, with marked shift of the heart and mediastinum to the right. Nine hundred cc. of serosanguineous fluid were aspirated from the left side of the chest, with relief of symptoms. Several days later 300 cc. of fluid were removed. Otherwise, the patient made an uneventful postoperative recovery.

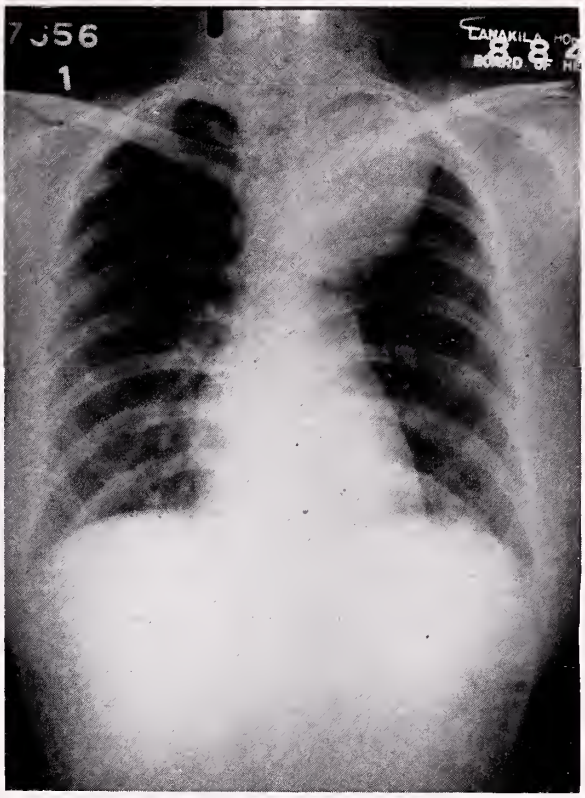


Fig. 18 (Case 10).—Tumor left upper posterior mediastinum. Neurofibroma, probably arising in thoracic sympathetic chain.

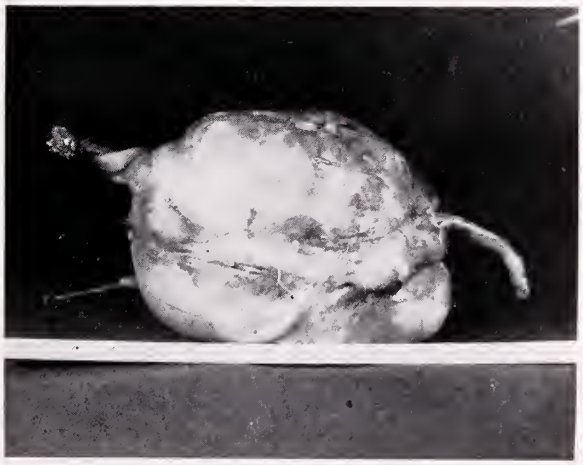


Fig. 19 (Case 10).—Photograph of tumor showing sympathetic chain attached on either side.

Discussion

Contraindications to Operation

When a diagnosis of a tumor of the mediastinum is made, three questions arise that demand investigation and, in so far as is possible, should be answered in the negative before surgery is advised.



Fig. 20 (Case 10).—Incision for posterior lateral approach.

First, is it a metastatic lesion? Second, is the tumor due to lymphatic node enlargement resulting from Hodgkin's disease or due to some primary blood dyscrasia? Third, is it an aneurysm? If the answer to any of these questions is in the affirmative, surgery is not to be considered.

If x-ray study shows the lesion to be well circumscribed; observation for a considerable period shows it not to be increasing in size; it has produced no symptoms; and after careful inquiry the patient has nothing suggestive in the history of trouble elsewhere, and careful physical examination is negative; then one may, with a fair degree of safety, conclude that the lesion is primary in or adjacent to the mediastinum and is probably benign. If any doubt exists, the patient should be subjected to a careful investigation, particularly as related to the gastrointestinal and genito-urinary tracts.

As regards Hodgkin's disease, a careful search for enlarged lymph nodes, particularly in the cervical region, should be made; and if one is found, it should be removed for microscopic study. Response to deep x-ray therapy is also quite suggestive that one may be dealing with Hodgkin's disease.

Enlargement of mediastinal lymph nodes resulting from leukemia should be recognized by blood and bone marrow studies—often repeated, if necessary.

It would seem that an aneurysm involving the arch or the descending portion of the aorta could be diagnosed with accuracy in all cases. That such has not been the case is verified in the writings of those who have had the most experience. Expansile pulsation is not always evident under the fluoroscope, because it may be prevented by clotted blood, partially or completely filling the aneurysmal sac. Conversely, a tumor lying adjacent to the aorta may show transmitted pulsation and be extremely difficult or impossible to differentiate from an aneurysm. Anyone exploring a sufficient number of suspected mediastinal tumors will in all probability sooner or later be chagrined to find that the tumor is part of the aorta. Early recognition of this fact is most desirable.

Another question that arises for consideration when an asymptomatic tumor is accidentally discovered is: Should such a tumor be removed? It would seem that the answer should unreservedly be yes if the individual is physically fit for such an operation. No one can be sure whether or not the lesion is malignant at the time, and all such lesions are potentially so. If it is benign it will, in all probability, increase in size and produce symptoms sooner or later, and if it is a cyst it will probably become infected.

Routes of Approach

In the surgical approach to mediastinal lesions, an incision placed nearest the lesion should generally be used. However, a lateral incision, with resection of one or more ribs and severing of others as needed, gives the widest exposure. This is the incision that should be used for tumors of considerable size, regardless of location in the mediastinum. If the lesion is thought to be infected, an extrapleural approach is desirable, though not always feasible. This requires resection of one or several ribs either paravertebrally or parasternally, depending upon the location, with careful stripping back of the pleura. If the pleura has not been thickened by inflammation, it is difficult or impossible to keep from entering the pleural cavity.

Anesthesia

The anesthetic of choice in our experience has been cyclopropane, preferably but not necessarily given intratracheally. Expanding the lung intermittently every twenty to thirty minutes, rather than attempting to work with the lung constantly inflated, is desirable. After the chest is closed, even though the lung is inflated during this time, the pleural space should be as completely emptied of air as possible by aspiration.

Other Considerations

During the patient's postoperative course a careful watch should be maintained to see that embarrassment of respiration or circulation does not occur from residual pneumothorax or accumulation of fluid in the pleural cavity. Cyanosis, rapid labored breathing, wheezing respiration and increasing pulse rate are all signs that this may be taking place and call for careful physical examination and portable x-ray study of the chest. Displacement of the mediastinum toward the unoperated side with air and/or fluid in the chest operated upon, necessitates aspiration repeated once or several times as indicated.

The giving of penicillin in adequate doses before and after operation, we believe, is advisable and if there is possibility of contamination of the pleura, penicillin—50,000 units in saline solution—is left in the chest. The pleura is drained only in the presence of a definitely infected lesion and here sulfa drug in addition to penicillin is used.

Conclusion

The safety of surgery of the mediastinum, like the safety of gastric resection, lies in adequate preoperative preparation of the patient, careful attention to operative details, and adequate postoperative care. These measures need no reiteration here because they have so frequently been called to our attention. They have, within comparatively recent years, permitted the exploration of the thoracic cage with almost the same freedom as, and with results quite comparable to those of, exploration of the abdomen.

881 South Hotel Street.

Discussion

DR. D. R. CHISHOLM:—I would like to congratulate Dr. Strode on his concise presentation of a subject which could easily fill a text-book. There is little I can add except in the way of emphasis. I believe the chief lesson to be learned from Dr. Strode's paper is that exploratory thoracotomy is scarcely more hazardous than exploratory laparotomy and, like the latter, can save many lives.

It makes little difference whether an apparently operable mediastinal tumor is malignant or benign as far as the principle of surgical exploration is concerned. Not only are most benign thoracic tumors liable to malignant change, but their pressure and obstructive effects on vital mediastinal structures have given them a malignant reputation.

I should like to refer briefly to the most important of all mediastinal or paramediastinal growths, bronchogenic carcinoma.

In a recent analysis (*Annals of Internal Medicine*, March, 1947) of a large series of cases of bronchogenic carcinoma, Hollingsworth, of Ann Arbor, comments on what he terms the "shocking fact" that "in more than 50 per cent of the cases a diagnosis of bronchogenic carcinoma was not made for six or more months after the patient sought medical advice." This is a sober challenge to the physician.

Because it is an intrabronchial growth, this carcinoma very commonly gives rise to warning symptoms while the tumor is still in an operable stage. Seventy per cent of these patients complain of cough as one of their initial symptoms. The tendency to use cough medicine liberally and the bronchoscope sparingly is responsible for many needless fatalities from bronchogenic carcinoma. Again to return to the main lesson of Dr. Strode's paper, the thoracic surgeon considers exploratory thoracotomy to be well advised in all cases in which bronchogenic carcinoma may be suspected.

On the Mode of Action of Sulfonamides

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THE mode of action of sulfonamides has given rise to a vast literature, which has contributed to an understanding of many fundamental processes. The present investigation was undertaken to study the mechanism of action of sulfasuxidine, a conjugated compound widely used in many gastro-intestinal disorders, but soon it was extended to other sulfonamides, as well.

Poth and his coworkers, in their clinical experiments, secured very striking results in treating both the acute and the more chronic forms of bacillary dysentery.[1] They found the drug useful even in presence of extensive ulcerative lesions of the bowel and suggested its use for the preoperative preparation of patients requiring gastro-intestinal operations, on account of the significant bacteriostasis of the coliform organisms.[2] Streicher[3] in a clinical evaluation of sulfonamides in infectious diseases of the colon, found that sulfasuxidine as an intestinal antiseptic was superior to any of the previously discovered derivatives of the sulfonamide group. Brewer and Angus[4] stated that the bacteriostatic effect was directly proportional to the amount of drug present and inversely proportional to the number of bacilli present.

Welch, Mattis and Latven[5] in a toxicological study of succinyl sulfathiazole found that the absorption from the gastro-intestinal tract is very limited and toxic symptoms rarely, if at all, develop following the oral administration of the drug.

So often in chemotherapeutic experiments good results alternate with failures that it seems natural to advance the question of special host-parasite relations. Both from a clinical angle and a bacteriologist's point of view it is of interest to find out whether there exists a relation between effective therapy with one brand of sulfonamide and the biochemical characteristics (fermentations, proteolysis, etc.) of the bacterium involved in a certain pathologic process. The approach to the problem must be multiple. The action of drugs upon organisms cannot be explained in single terms; it is usually complex, as complex as the nature of the matter upon which it acts. The development of one angle alone would lead to a blind alley and to the magnification of incidental factors at the expense of other important ones.

Experimental

Sulfasuxidine added to the culture medium in concentration of 1:10,000 to 1:2,500 showed no appreciable bacteriostatic action upon bacterial growth. Occasionally gas production was more abundant in tubes containing sulfasuxidine than in the controls, indicating that in non-bacteriostatic concentrations the drug may stimulate bacterial fermentations. There was no instance in which a bacterial strain failed under the influence of sulfasuxidine to ferment a sugar which it did in the control tubes. The only bacterial strains completely inhibited by a concentration of 1:5,000 sulfasuxidine were Brucella melitensis, Br. suis and Br. abortus. However, it may be mentioned at this time that Br. suis in particular, after a number of passages on ordinary tryptose phosphate broth, developed a certain degree of resistance to the action of sulfonamides. This, to a certain extent, was true also of other strains, which were more susceptible to sulfonamides when freshly isolated, but developed some resistance after a number of passages on ordinary media. There has been a large amount of work to correlate concentration of sulfonamide with percentage of inhibition. Such correlation exists, as it has been proved by Mellon *et al.*,[6] but according to Mellon's tables the growth inhibition is not strictly proportional to the increase in sulfonamide concentration.

In this investigation, strains were selected from Eberthella, Salmonella, Shigella, Brucella, Proteus, Alkaligenes, Escherichia, Pseudomonas, Streptococcus (fecalis), and Staphylococcus.

There was no attempt to secure exact quantitative data on growth of the various bacteria cultivated in presence of sulfasuxidine, as the problem was not that of testing the degree of inhibition of

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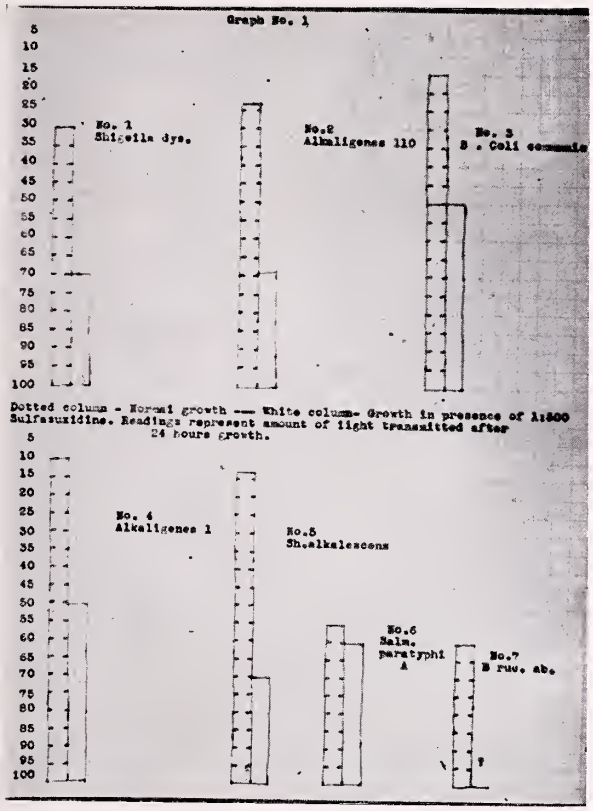
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[6] Mellon, R. R., Gross, P., Cooper, F. B.: Sulfanilamide therapy of bacterial infections, Charles C. Thomas, Springfield, Illinois, 1938.

the drug, but the mechanism by which this inhibition is manifested. For this reason, the concentration of sulfonamide was kept at such level as to prevent complete inhibition. The data in Graph I represent photometric readings of the more susceptible strains, and are expressed in percentage of turbidity. Of course, there is an inherent source of error in this type of measurement: the readings include both viable and non-viable bacteria.



Discussion

Bacteriostasis evidently cannot be defined without qualifications, as there are no standard methods for testing efficacy of a drug, and many variables are usually introduced in each investigation. For *in vitro* experiments, the choice of a medium, time of incubation, age of the culture, and number of bacteria inoculated, are all important factors which influence our conclusions.[7] Strauss and Finland[8] found that a blood broth medium would counteract sulfadiazine more than it would sulfathiazole and showed that there is no perfect correlation between *in vitro* and *in vivo* action of a drug. Schmidt and Stuber[9] found that sulfapyridine is more effective in a medium containing serum than in one containing whole blood.

Often it is said that the size of the inoculum is a factor in bacteriostatic action.[10] However, in our experiments, serial inoculation of tubes, without recharging the loop, showed no significant inhibition of growth of non-sensitive strains in tubes where the inoculum was smaller. Another point that perhaps has some importance too is the time of isolation of a certain bacterium. Many strains which in our experiments were sensitive when recently isolated became less susceptible to bacteriostatic agents after several passages on laboratory media. This point may well be kept in mind by those who use stock cultures in their investigations on bacteriostatic agents.

In their general lines, the results obtained in our experiments agree with those obtained by other authors. Alkaligenes, Brucella, and Shigella were definitely the more susceptible strains; strains of Escherichia showed different behavior; Proteus strains were not sensitive except for the non-motile strain, Proteus OX19. Eberthella typhi and all the Salmonellas were among the more resistant, with exception perhaps of Para A, the least resistant of the Salmonellas used in the experiments. It seems that motility or non-motility is a much more important factor than gram positivity or gram negativity, as non-motile organisms were those more promptly inhibited.

The great susceptibility of the various Brucellas to sulfonamide action has been described also by other authors. Chinn[11] found that Br. abortus and Br. suis are very susceptible to sulfanilamide both *in vitro* and *in vivo* and Worley, Beal and Schuherdt[12] found that sulfathiazole and sulfadiazine were equally effective against Brucella in synthetic medium. T'ung Tsun[13] found that the action of penicillin upon Brucella was enhanced by the addition of a very small amount of sulfathiazole. Greene[14] considers that bacteriostasis depends not only on the amount of drug which is concentrated in the bacterial body, but on the nature of the bacterial envelope, and the permeability of the cell membrane to the anti-sulfonamide factor released during autolysis of dead bacteria. He isolated this anti-sulfonamide factor from Br. abortus and other bacteria and gave it the name of Factor "P."

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The results *in vivo,* however, do not parallel those *in vitro,* as Brucella infections are not easy to control by means of sulfonamides.

Para-amino-benzoic acid did not antagonize sulfonamide inhibition of Brucellas in our experiments, though Wise[15] stated that it does. The action of PABA may be carried out by other substances of similar structure, like procaine, which are used for therapeutic purposes.[16]

Since the discovery of the anti-sulfonamide action of PABA, and the original work of Woods, its role has been object of numerous investigations.

Among the more serious objections to the theory of PABA is the finding that other substances not related structurally to PABA may counteract the action of sulfonamides. Bliss[17] found Neopeptone protective for streptococci, King and Kaplan[18] noted that disintegrating tissue reduces the bacteriostatic effect of paranitrobenzoate, and Lockwood and Lynch[19] noted that proteolytic products reduce the effectiveness of sulfanilamide. Lockwood[20] found that when peptone is excluded by washing the inoculum in serum or saline, sulfanilamide inhibits completely the multiplication of young streptococci in serum, and sterility frequently results within twenty-four hours, if the inoculum is less than 5,000 chains per cc. He suggested that sulfanilamide prevents the metabolic activity of invasive organisms through prevention of the utilization of the protein substrate.

To the findings of the above-mentioned authors can be added the antagonistic action of carbohydrates as demonstrated by Sevag and by our experimental findings already reported in a separate article. All these substances are present in the animal organism and certainly have an influence upon the action of sulfonamides *in vivo.*

The action of sulfonamide cannot be strictly called specific. Wyss, Greebaugh, and Schmelkes[21] found no evidence of specificity of any special compound on any one strain. The belief prevailing among clinicians that a certain compound is preferable to others in the treatment of this or the other infection finds no support whatsoever in various experimental tests carried out. As Henry points out,[22] there is little critical clinical evidence to support this, and the analysis of *in vitro* experiments shows that the various commonly-used sulfonamides are non-specific for numerous bacteria, included the tubercle bacillus.

Bliss and Long, and Green and Parkin,[23] showed that bacteriostasis is the only demonstrable factor and that no specificity is evident.

Although contradictory reports are not lacking, it is the general trend now to recognize the non-specificity of sulfonamide compounds. The difference in susceptibility of the various bacteria is more a question of degree than of a true specificity.

Johnson, Glauback, Fisher, and Henry[24] compare the sulfonamide action to that of narcotics. Sulfonamides, like narcotics, are acting upon that part of the metabolism which is concerned with growth and division and do not act upon the "resting" respiration, as the paper by Hirsch[25] clearly demonstrates.

In regard to the mode of action, Shaffer[26] was of the opinion that sulfonamides are ineffective on growth of bacteria in the absence of oxygen. According to him, a dominant reducing environment should protect tissues from sulfanilamide products.

It is perhaps not out of place to correlate the old work of MacLeod and Gordon[27] with some aspects of sulfonamide action. There is probably a relation between glutathione-reducing ability of bacteria and their susceptibility to sulfonamides. Non-reducers, such as many cocci and the influenza and dysentery bacilli, are definitely more susceptible to sulfonamides than strong reducers, like paratyphoid B and the anaerobes. Considering the role of glutathione, one can easily understand the importance of it in the respiratory metabolism of the bacteria. Its chief function is that of reactivating the protein enzyme possessing —SH groups. When the —SH groups are oxidized during oxido-reduction processes, glutathione reduces the

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inactive —S—S— groups to active —SH groups. Since a large number of enzymes possess this group, glutathione plays a fundamental role in cellular respiration.

It is increasingly clear that the mechanism of action of sulfonamides is far from simple and cannot be drawn along preconceived lines. For example, cell division is possible only if there is good growth, and good growth presupposes normal metabolism. If the dehydrogenase system is interfered with, good growth or normal cell division cannot be expected. As all are manifestations of life, we may well say that life is one and indivisible: any interruption in the link will disturb the harmony of the whole.

With the experimental evidence at hand, it seems clear that the principal action of sulfonamide is exerted upon the dehydrogenase system and that those bacteria which either do not have an adequate system, or lack an accessory system, of respiration, like the succinic-acid-fumaric-acid-malic-acid system, are more susceptible to sulfonamide inhibition, than those which have a very active dehydrogenase system or potential accessory systems.

Hilo Memorial Hospital.

Discussion

DR. E. A. FENNEL:—The Association should be flattered to have had offered to it such an erudite discussion of a very complex—but very useful—subject. Dr. Gerundo has well emphasized the complexity of the mode of action of the sulfonamides—complexities, I fear, that are still beyond many of us.

My first experience with Prontosil was on me, the patient. An erysipelas-like infection involved half my scalp; my white count was 'way up; and I was beastly sick. My attending physician very cautiously administered Prontosil. On the third day, I was pretty blue, mentally and physically, when I fell asleep; when I awoke, I was a well man—well, at least as well as I ever was. I did not look a gift horse in the mouth and wonder how the drug worked; I was satisfied, as was.

The spectacular results I saw at Tripler Hospital on that December Seventh demanded some explanation, if only a reasonable working hypothesis. The confusing, inconsistent results reported up to that time in *in vivo* and *vitro* experiments offered no acceptable explanation of the mode of action of these drugs, so widely used that day. And so, being an old-timer, I fell back on an old habit of thought. Why not apply all the old theories of the opsonins to explain the action of the new sulfonamides?

You of the younger generation may remember little or nothing about opsonins.

Serum, guinea pig complement and the specific bacteria were mixed and incubated, just as a serum, complement and antigen are combined in the first step of the Wassermann reaction and then fresh, living leucocytes were added and incubated and then examined, just as in the second step of the Wassermann reaction when the hemolytic system is added and observed. The number of phagocytized bacteria determined the "opsonic index" and measured the antibodies of the patient and his ability to recover.

Conversely, the reaction was used to identify unknown bacteria. A specific antiserum was mixed with complement and the unknown bacteria, later the leucocytes, were added. A high degree of phagocytosis indicated specificity.

Why not, then, apply that phenomenon to the *in vivo* action of the sulfonamides? These drugs took the place of the natural antibodies in the reaction. In the presence of natural complement they did something to the bacteria. Just what that "something" might be was problematical, but the spectacular results of the sulfonamides on the pneumococci with their protecting capsules suggested that the first step of the reaction might be a dissolution or damage to the capsule and in the non-encapsulated organisms, a change in their surface tension. With this armor destroyed or damaged, these bacteria then fell prey to the leucocytes.

At least, that was a good working hypothesis and let me sleep at night, rather than lie awake wondering about the mysterious mode of action of the new wonder drugs.

With the advent of the sulfa drugs, in the laboratory the Quellung reaction on pneumococci in sputum became very inconsistent, probably depending on the concentration of the sulfa drugs in that sputum.

The discovery that PABA in many cases restored the capacity of these capsules of pneumococci to swell in the presence of type specific sera strengthened me in my belief in my working hypothesis.

Just how the sulfa drugs affected these capsules or the surface tension of bacteria was still a physicochemical mystery.

Much work on that problem has been done since those days; much light has been thrown on the mechanism—and Dr. Gerundo has added to that light.

But because my training in biochemistry and bacterial metabolism has been inadequate, I am afraid that this mystery must remain for me a mystery to my dying day. In the meantime, I shall cling desperately to my working hypothesis of the opsonins.

Modern Concepts in the Treatment and Diagnosis of Fungous Infections of the Skin

HAROLD M. JOHNSON, M.D.
HONOLULU, T. H.

THE diagnosis and therapeutic possibilities of cutaneous superficial fungous infections have been a problem to the practicing physician. The literature and trade journals supply many new "sure cure" preparations that are eagerly accepted and tried on the unsuspecting patient. We, as physicians, are a gullible group; and many times various fungicides are devised by the pharmaceutical house or self produced in a prescription that are chemically incompatible and produce reactions varying from severe cutaneous sensitization to actual sloughing of the soft tissues. With this thought in mind, a few modern concepts should aid the physician in the proper therapeutic management of cutaneous fungous diseases.

During the war period between 1940 and 1943 the Navy hospitalized 14,068 patients for fungous infections of the skin,[1] the large majority of them involving the feet or groin. These patients lost 251,418 man days from active service. This is a considerable fraction of the actual number of service personnel hospitalized during the entire war period. In the South Pacific area fungous infections caused a terrific loss of man war-days. Even in normal times, from 50 to 90 per cent of the young adult population are affected at some period. Early recognition of the causative fungus and proper therapy is most important in relief and cure of the infection.

Tilbury Fox[2] first observed a ringworm of the palm in 1870. Twenty-two years later, in 1892, Djeladeddin-Moukhtar[3] was the first to make cultures from scales and vesicular fluid from the hands and feet. Since that time it has been a diagnostic procedure which enables the physician to determine the type, immunologic response and the possibility of cure. This is a science that requires special training to correctly interpret culture growth.

A study from the New York Skin and Cancer Clinic[1] from 1935 to 1943 lists positive cultures from the feet as being 65.4 per cent Trichophyton gypseum, 15.7 per cent by Trichophyton purpureum, 13.5 per cent by Monilia albicans and 2.8 per cent by Epidermophyton inguinale. Thus, four fungi cause practically all the cases of dermatophytosis seen throughout the United States. Trichophyton gypseum and Monilia albicans have been common offenders in Hawaii. Trichophyton purpureum has been only occasionally seen in my practice.

Trichophyton gypseum, which produces the largest proportion of infections, causes an acute inflammatory type of dermatophytosis in which vesicles are predominant. It may be preceded by scaling and maceration or cracking between the toes for months or years. Small vesicles may be present and are usually limited to the soles or to the sides of the foot. The vesicles at first are deeply seated and contain a viscid fluid with very little erythema around them. They may appear as discrete vesicles or in small groups.

The vesicles may regress and become dry brown macules that desquamate. These lesions harbour infection. They occasionally become secondarily infected by streptococci or staphylococci producing severe pustular dermatitis, cellulitis and even a septicemia.

Trichophyton purpureum produces a noninflammatory type of dermatophytosis. The plantar surface, sides of the feet, toes and toe nails are commonly involved. Even portions of the heel and ankle can be infected. It is not infrequently seen on the hands. The absence of vesiculation in the presence of severe itching is a constant feature.

Moisture or excessive sweating is frequently found with Trichophyton gypseum and Trichophyton purpureum infections. The sweat produced between the toes has a higher pH and acts as a perfect culture medium for the fungi. This ammoniacal or alkaline sweat activates the spread of infection. Hot weather and tight shoes also promote fungous growth by stimulating sweat.

Monilia albicans is a "yeast-like" organism and not a dermatophyte. Moniliasis is a common cause of intertriginous infections between the toes and fingers, in the groins, and under pendulous breasts. The skin between the toes becomes bright red, weeping and fissured. It may also appear as milky white. Moniliasis is commonly seen on the hands

Read before the 57th Annual Meeting of the Hawaii Territorial Medical Association, Lihue, Kauai, May 3, 1947.

[1] Montgomery, R. M., and Casper, E. A.: Cutaneous manifestations of the fungi causing dermatophytosis and onychomycosis and their treatment, J.A.M.A. 128: 77, May 12, 1945.

[2] Fox, T.: Tinea circinata of the hand, Brit. M. J. 2: 116, July 30, 1870.

[3] Djeladeddin-Moukhtar: De la trichophytie des regions palmaire et plantaire, Ann. de dermat. et syph. 3: 885, 1892.

of waitresses, bartenders and housewives who have their hands continually immersed in water and alkali soaps. Diabetes may be a complicating feature.

Epidermophyton inguinale affects the groin and feet. Similar clinical characteristics prevail and resemble Trichophyton purpureum infections.

Hand infections may be caused by the above mentioned fungi. Also the dermatophytid localizes on the hands, in what Stokes would call the "trigger areas." It usually appears as small vesicles on the palms and fingers and is more evident in cases of acute fungous infections of the feet. The vesicles are sterile and represent a toxic phase. These cutaneous explosions are from an infected focus and are the expression of extending, broadening or heightening the allergic susceptibility of the individual to his infecting agent.

One should be careful not to make a "curbstone" or "snap" diagnosis of vesicular eruptions of the feet and hands. The explosive "-id" manifestations can be caused by sensitization to penicillin, sulfonamides, mercurials and many other drugs. The intertriginous dermatitis is commonly caused by an allergy to shoe leather, shoe polish, colored hose, and so on. It is a common occurrence to get a history of a small crack between the toe, which doubles in size after being soaked in lysol or clorox or after the shoes have been disinfected with formaldehyde. Underwood *et al.*[4] have stated: "The human foot has become the target of unbelievable chemical abuse. Feet are seen daily, painted all colors of the rainbow or daubed so thick with salves that removal with a tongue blade is necessary to view the underlying dermatitis. The patients, when questioned about the number of remedies used, shrug their shoulders and exclaim 'I couldn't begin to recall. I've used everything. You are the seventh doctor I have seen. I've had the stuff between my toes for years. Just when I think it is well, it is back again. I've spent a small fortune for remedies and look at my poor feet.' " You can't help feeling sorry for these unfortunate individuals who believe they have athlete's foot, Waikiki itch, Portuguese rot, or the Chinese crud. A careful history and examination may reveal a contact allergy, bacterial or constitutional disease and no evidence of a fungous infection.

Methods of Diagnosis

One of the best and easiest methods of diagnosing a fungous infection is by the clinical picture and history, but there are several definite procedures whereby the physician can conclusively prove the diagnosis.

The direct examination is the simplest and most important single means of laboratory investigation. The method consists in mounting a specimen of skin (vesicle or scale), hair, nail scrapings, or pus in fifteen per cent sodium or potassium hydroxide solution under a cover slip and examining it under the microscope. Beaded segments of filamentous threads are diagnostic. One must be careful to correctly interpret the findings, as cotton fibers and other contaminants will suggest a similarity to fungous mycelia.

The cultural method is most important to determine the type of ringworm and suggests a prognosis and a type of treatment. Infected hairs from the scalp, scrapings from nails or skin can be placed on a suitable culture medium, as Sabouraud's medium. In ten days to three weeks the identification can be ascertained.

The trichophytin test is specific in that it denotes sensitization with a dermatophyte. This test material is made as an extract from common dermatophytes. The trichophytin is given intradermally (0.1 cc.) and read in twenty-four to forty-eight hours. The size of the wheal and erythema denotes the positivity of the test. Lewis and Hopper[5] state that the test is specific and that patients with primarily inflammatory eruptions, proved by culture to be fungous, inevitably show positive cutaneous reaction to trichophytin. They also believe that a positive reaction is of value but a negative reaction is of greater value when one is trying to decide whether an inflammatory eruption is of mycotic origin. Trichophyton purpureum infections have a decidedly low cutaneous sensitization effect and frequently do not react to trichophytin, thus indicating a poor prognosis.

Treatment

Underwood[4] has listed an astounding number of chemicals used in dermatologic textbooks and literature. He lists 31 tars and derivatives, 40 metallic compounds, 22 plant products, 9 alcohols and 12 animal products or a total of 114 medicaments. I believe this is but a fraction of the home remedies used. They vary from boiled cherry juice to horse and human urine which is poured over the feet and hands and rubbed into the skin.

There are many effective methods to treat dermatophytosis. It has been said before that intelligent therapy depends on the proper use of drugs in relation to the clinical appearance and identity of the organism. Most of the old drugs are effective. If the physician uses a few simple rules and proven medications, the reward will follow. If

[4] Underwood, G. B.; Gaul, E. L.; Collins, E.; and Mosby, M.: Overtreatment dermatitis of the feet, J.A.M.A. 130: Feb. 2, 1946.

[5] Lewis, G. M., and Hopper, M. E.: An introduction to medical mycology, The Year Book Publ. Inc., pp. 14-34, 1939.

there is an acute inflammatory reaction, soothing remedies should be used. The vesicles and bullae should be opened and drained, or the tops clipped, and wet dressings applied. There are a variety of solutions to be used. One may choose from saturated solution of boric acid, Burow's solution 1:20, potassium permanganate 1:4,000 or 1:8,000, and silver nitrate 1:5,000 or 1:10,000. Penicillin, Furacin and ammoniated mercury cream can be used if the lesions are secondarily infected with staphylococci or streptococci. Debridement of all denuded areas, crusts and tags of skin is important. Failure to clearly debride favors relapse and progression of the infection. The fungus thrives in macerated, devitalized scale and vesicular areas.

The Castellani carbolfuchsin paint is more lastingly effective and has been the drug of choice at the dermatologic clinic of the University of Pennsylvania for fifteen years. Stokes and the author[6] found this preparation to be the most effective fungicide used in 200 cases. Castellani paint is a tricky preparation. It should be made fresh every six weeks and kept away from light. It contains both phenol and resorcinol, to which some patients are sensitive. It has a flaming magenta color. All patients should first be patch tested to it in dilution 1 to 3 with tap water; if there is no irritation, full strength should be applied. As vesicles disappear, the dry scale can be removed by (00) sandpaper or an emory board.

One quarter to ½ strength Whitfield's ointment or 3 to 5 per cent ammoniated mercury ointment can be used. Precipitated sulfur and salicylic acid, 1 to 3 per cent, are also satisfactory. One should not use sulfur and mercury together, as a severe mercury-sulfide reaction may occur. Iodine and sulfur are also contraindicated in combination.

During the last ten years, drug firms have been trying to find the answer for the best fungicide. In 1938 Peck and Rosenfeld[7] found that organic fatty acids occurring in sweat have considerable fungicidal action. They found that the sodium salt of undecylenic acid had the strongest fungicidal action of all tested fatty acids and their salts.

Trade journals are full of the virtue of zinc undecylenate (20 per cent) and undecylenic acid (5 per cent) in a vanishing cream base (pH 6.5). Shapiro and Rothman[8] state complete clinical cure could be achieved with undecylenate preparations within 4 weeks (86 per cent). Relapses did not occur if treatment was continued. I believe the virtue of this new preparation is that it is almost nonirritating and still strongly fungicidal. I have seen a few patients that could not tolerate the preparation—probably allergic to the base. I have also seen failures in its therapeutic use. This undecylenate powder inhibits the growth of fungus and is an excellent preparation to be used as a dusting powder in shoes and hose and on the feet. This powder cuts down relapse and progression.

Another promising fungicide is sodium or calcium propionate. These substances are customarily used in bread dough and dairy products for inhibition of mold growth. The propionate was used in 10 per cent concentration in a powder and ointment. The preparation can be tolerated by most senstive skins. Sulzberger *et al.*[9] found it quite effective in dermatomycosis of the feet.

X-ray therapy, if used correctly in small fractional dosages, aids in the alleviation of itching and stimulating localized tissue immunity. X-rays have *no* effect on the fungous spores or mycelial threads, contrary to the thought of the general physician. A warning has frequently been given regarding the clinical cycle of the disease—treatment, "cure," recurrence, treatment, "cure," and eventually the treatment results in irremediable, irreversible x-ray damage.

Non-contagiousness

The author has been interested in the exogenous infection (in exposure to other patients in active phases of the disease) in that it has played a negligible role in the production of ringworm of the feet and groin.

In a series of several hundred acute and chronic ringworm infections of the feet and groin, I have not seen a case of conjugal or familial transmission. Sulzberger, Baer and Hecht[10] sent out questionnaires to 88 outstanding American dermatologists, all experienced in the treatment of fungous disease; together they reported only 4 cases of proven familial transmission of ringworm of the feet or groin.

Almost all of our adult patients may carry pathogenic fungi in a quiescent state on the groin, toe nails or feet, but they have flare-ups of their fungous infections only when certain trigger or contributory factors lower the individual resistance. We have seen acute exacerbations following acute and chronic debilitating diseases. The tired busi-

[6] Stokes, J. H.; Lee, W. E.; and Johnson, H. M.: Contact, contact-infective and infective—allergic dermatitis of the hands, J.A.M.A. 123: 195, Sept. 25, 1943.

[7] Peck, S. M., and Rosenfeld, H.: The effects of hydrogen ion concentration, fatty acids and vitamin C on the growth of fungi, J. Invest. Dermat. 1: 237, Aug. 1938.

[8] Shapiro, A. L., and Rothman, S.: Undecylenic acid in the treatment of dermatomycosis, Arch. Dermat. Syph. 52: 166, Sept. 1945.

[9] Sulzberger, M. B.; Shaw, H. C.; and Kanof, A.: Evaluation of measures for use against common fungous infections of skin, U. S. Naval Med. Bull. 45: 237, Aug. 1945.

[10] Sulzberger, M. B.; Baer, R. L.; and Hecht, R.: Common fungous infections of the feet and groin, Arch. Dermat. Syph. 45: 670, April 1942.

ness man with poor rest, high alcohol ingestion, vaso-motor instability, and excessive sweating that increases the pH of the skin, shows the fundamental predisposing factors to fungous flare-ups. Actually sweat becomes basic in its pH after a short time and this feature acts like "kerosene to a fire" and is a culture medium for fungous growth.

I always chuckle at the fancy gadgets placed in the showers of our country clubs. One has a weak solution of sodium hyposulfite that invites you to walk through. Theoretically it has been shown that the feet must be immersed for one hour in this solution to be of any value. Another club has a small foot stand that squirts a spray of thymol and salicylic acid on the feet and up between the legs. If this prevents ringworm infection, then I can grow hair on a cue ball. It is interesting to see patients with a euphoric gleam as they step away from these contraptions. Many husbands and wives are so fungus conscious that they spend unnecessary time and money to prophylactically cleanse their feet and showers. Lysol to lye solutions are used in strength that produces contact allergies. This prepares a fertile ground for fungous infections—if present.

I have followed the concepts of Sulzberger by telling patients that the common forms of fungous infections of the feet and groin are rarely, if ever "contagious" for other members of the family or household, and I do not advise protection of others but confine my efforts to the treatment of the infected person. Explicit directions and prophylactic measures are designed to prevent relapse in the patient himself.

Summary and Conclusions

Dermatomycosis is prevalent in the Hawaiian Islands. Its various species produce a definite type of inflammatory or non-inflammatory reactions in the skin. A true diagnosis can only be made by culture and microscopic examination. The identified species suggest a prognosis and the possibility of eventual cure.

The improper use of irritating, non-fungicidal preparations should be curtailed. The pharmacist, who treats more ringworm than a dermatologist, should be warned against the injudicious use of proprietary remedies. It has been said that improper therapy causes more visits to the dermatologist than any other skin disease.

Predisposing causes represent newer conceptions of skin physiology. The factors of emotion, posture, activity, sweat and general health are as important to the cure and prevention of relapse as the use of keratolytic and fungus-inhibiting drugs.

Most of the older fungicides are still effective. The sulphur-salicylic ointments, Castellani paint and many other similar fungicides have stood the trial of time.

Recently new fungicides, such as 20 per cent zinc undecylenate and 5 per cent undecylenic acid in a vanishing cream base, offer exceptional preparations with minimal allergic tendencies.

The ointment, and its powder equivalent, offer an ideal drug for the prevention of occurrence and relapse in susceptible people. A similar statement can be made for the salts of propionic acid.

It is correct to assume that familial and conjugal exposure play no role in eliciting attacks of ringworm of the feet and groins. This observation leads to the conclusion that many widely publicized measures of prophylaxis are therapeutically illogical and may even be harmful. It is believed that changes in host susceptibility and loss of local immunity cause more relapses and flare-ups than new exposures to fungous organisms.

The early recognition of the involving organism, treatment of the predisposing causes and the simple hygienic care with conservative fungicides are paramount in producing and effecting a cure.

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[EDITORIALS]

SHENANIGAN IN HAWAII

"Skirmish in Hawaii" is the title of an article appearing in the October issue of *Survey Graphic,* one of the pinker "liberal" magazines. It is from the pen of Michael Davis, pillar of the House of (Isidore) Falk, long-time propagandist for federal compulsory sickness insurance, and one of those who well might be, if he has his way, a Federal Commissar for Health, if and when a Murray-Wagner-Dingell bill, or some similar state medicine measure, is enacted in Washington.

"Skirmish in Hawaii" is Mike's version of what happened when a compulsory sickness tax was proposed by Hawaii's Hospital Service Study Commission last spring. The shellacking the proposal got in Hawaii, after the implications of the plan became generally understood in the community, apparently was not to Mike's liking; and he says so at length, pulling out all the stops and employing all the devices that one might expect from an old socializer, long known for his gift of gab and his abilities as a propagandist.

Mike's admiration for the Hospital Service Study Commission which proposed a compulsory sickness tax law for Hawaii is great. He finds it hard to believe that its recommendations did not meet with favor.

"Of the five who served," says Mike, "the Chairman and Vice Chairman are first rank business men of the Territory, a third, a former AFL official, is now a labor relations man for a business corporation; one is a woman prominent in social work, connected with the leading hospital in Honolulu; the fifth a physician, former president of the local medical society and long the medical advisor of the Hawaii Sugar Planters' Association."

Mike continues:

"It seems incredible that red-baiting could have been the chief weapon against the plan sponsored by such a group, yet it is the unbelievable that happened. The individual members were not assailed as such, but a more vulnerable target, the professor of public health at the University of Michigan, who had been technical consultant to the commission, was a 'foreigner' and was dealt with accordingly."

Well, for Mike's benefit, and for the information of anyone else who may be interested, here are the facts:

No one who was qualified to know believed for a moment that the Hawaii compulsory sickness tax proposal was the Commission's own baby.

It was recognized at once for what it was: the product, hook, line, and sinker, of one Nathan Sinai, Ph.D., known as a member of the faculty of the University of Michigan, but even better and longer known as a henchman of Isidore Falk, Michael Davis, et al., propagandists supreme for compulsory governmental health insurance.

The words, the music, and the punctuation were recognizable to any one who had ever familiarized himself with the mental gymnastics or literary style of these gentlemen and their fellows.

It should be significant, even to Mike, that the members of the Commission—with the single exception of the social worker member—were as silent as the grave in the discussions of their magnum opus which followed its release. Never, never was silence more eloquent.

Why should their fellow citizens further embarrass them? After all, they are not the first group of well-intentioned, public-spirited persons who ever discovered, to their chagrin, that they had been carrying the ball for the pinkos.

Mike may have been misinformed, but he states:

"Perhaps the most regrettable part of the whole

course of events is that the carefully worked out studies and proposals of the Commission had almost no public discussion of their merits."

One is tempted to believe that Mike knows better, but it may be just as well to be charitable and conclude that he just didn't get the right dope.

Most people in Hawaii would agree that the proposal was discussed and discussed, again and again, from every standpoint, and that in the last analysis, the proposal died for well-demonstrated *want* of merits.

Does Mike mean to intimate that the Directors of the Chamber of Commerce (with a single exception) were swayed by "combinations of emotionalism and misstatement" in deciding the proposal was not sound? Or the legislators, who didn't even report the bill out of committee? That's hardly a tribute to their intelligence.

Mike really gets het up when he tells "how the eagle eye of organized medicine of the United States Mainland saw a creeping precedent in the Pacific, and how a flying squadron went to make sure it died before it could walk."

The people of Hawaii may well be thankful for the assistance that was lent in time of need by the National Physicians' Committee for the Extension of Medical Care, although the contribution of that organization didn't add up nearly to what Mike would have you believe. To term the one representative of that organization who came to Hawaii a "flying squadron" is of course, an exaggeration of the type which professional propagandists affect.

For Mike to object to a representative of the National Physicians' Committee joining in the contest seems a little out of order and hardly good sportsmanship. For hadn't Nathan Sinai been here representing Isidore Falk and Michael Davis and the rest of their team for months before the National Physicians' Committee became conscious of a pink cloud over Waikiki?

Now here is an interesting historical note—interesting, that is, to those who like to put two and two together:

Ten years ago, the "prominent social worker" who later became a member of the Hospital Service Study Commission served with a local group which was then concerned with the costs of medical care. Even then an ardent admirer of Michael Davis, Ph.D., she wrote, on March 1937, to Mike, suggesting that he come to Hawaii to lend a hand.

Under date of April 19, 1937, Mike answered:

"Dear Miss Catton:

"Your letter of March 26 forwarded to me by the Julius Rosenwald fund, came while I was in the East, hence this delay in my response.

"I realize the interest and significance of the undertaking which your letter describes and which is enlarged upon in Mr. Shepard's letter to Mr. Embree. . . . I have too many other demands this year to make it possible for me to take the time for a visit to Honolulu, much as I appreciate the enjoyable suggestion.

"May I take the liberty of suggesting the possibility of your getting *Dr. Nathan Sinai of the University of Michigan?* [italics ours] Dr. Sinai has a rich and varied experience in the study of various enterprises in Michigan, Canada, and elsewhere. . . .

"With cordial regards, I am

"Sincerely yours,

(signed) "MICHAEL M. DAVIS."

Well!! Well!! Well!!

SOCIALIZED MEDICINE IN JAPAN?

Representative Forest A. Harness (R., Indiana) chairman of the sub-committee investigating government publicity and propaganda has shed more light on the government health mission which took off for Tokyo some time ago.

In a letter addressed to Chairman John Taber, of the Appropriations Committee, Harness urged the committee to eliminate all future funds for overseas travel for staff members of the Social Security Board, the U. S. Public Health Service, and other federal agencies interested in advancing socialized medicine in foreign lands.

Harness' letter to Taber was based on a six weeks' investigation into the health mission to Tokyo, which departed on August 28 to prepare a national health program for the Japanese Diet.

After reviewing the history of the Tokyo health mission, Harness presented eight specific charges and findings as the conclusions of his committee's inquiry:

"(1) That the health mission to Japan is composed entirely and exclusively of men long identified in the public record as advocates and proponents of socialized medicine not only in the United States but throughout the world.

"(2) That the real purpose of this mission is to lay the ground work for a system of socialized medicine in Japan.

"(3) That the scheme for such a mission originated in the Division of Research and Statistics in the Social Security Board in Washington, and nowhere else.

"(4) That the nominal request for the mission was engineered through the General Headquarters of the Supreme Commander in Tokyo by federal employees sent from Washington for that particular purpose.

"(5) That General Douglas MacArthur does not favor—and does not approve—any plan to establish compulsory socialized medicine in Japan.

"(6) That the dispatch of this mission to Tokyo for the purpose indicated in Mr. Wandel's letter to Mr. Falk under date of June 14, 1947, is a gross misuse of public funds.

"(7) That the real purpose of the mission is not to assist Japan in working out her basic problems in health and welfare, but to force upon that country a compulsory system of socialized medicine.

"(8) That although the questions here involved are of a health and medical nature, the Surgeon General of the United States Army was not consulted in reference to the problems involved."

Harness' letter said further:

"I deem it inappropriate for federal employees, at the expense of the American taxpayer, to travel throughout the world preparing or assisting in the preparation of legislation to be adopted by foreign countries when similar legislation, long pending, has not been approved by the Congress of the United States.

"We are continuing our investigation of the origins and real purposes of the Tokyo health mission. Meanwhile we believe that your Committee would want to have these facts before it when the next appropriation bill comes up for the Public Health Service and the Social Security Board."

In his letter to Taber, Harness referred to the fact that one of the members of the mission was Bernet M. Davis, Surgeon, U. S. Public Health Service.

"It has also come to the attention of our committee," the letter said, "that Dr. B. M. Davis, one of the members of the Tokyo mission returned only recently from London, where he was attached to the British Ministry of Health, to assist in the national program for socialized medicine in England. He is the son of Mr. Michael M. Davis, chairman of the executive committee of the Committee for the Nation's Health, the foremost lay organization agitating for socialized medicine in the United States, as embodied in the Wagner-Murray-Dingell bill. The Committee for the Nation's Health, as our previous reports have delineated, is the principal national organization in the United States engaged in distributing the propaganda of the Social Security Board supporting socialized medicine."

George F. Lull, M.D.
Secretary and General Manager
A.M.A.

FREE CHOICE OF PHYSICIAN, BUT WHOSE CHOICE?

Many doctors believe that patients suffering industrial accidents or industrial disease are permitted to choose their own physician. They are not. Choice of physician is unhampered, within broad limits, but it rests with the employer and not with the employee. The employee must go, unless he wants to pay the bill himself, to the doctor to whom the employer tells him to go.

The Bureau of Workmen's Compensation may modify this requirement in special cases. For example, if the employee has a complicated or very serious injury, and the employer directs him to go to a physician, and both the employee and the Bureau think that some other physician—a specialist, perhaps—would be preferable, then the employee may go to that other physician and the bill will still be paid by the employer's insurance carrier. *But,* if the employee is sent to a perfectly competent physician, and wants to change doctors merely for personal reasons—wants, for example, to go to his family physician instead—he will probably not be given permission (by the Bureau) to do so.

YOUR DIRECTORY INFORMATION CARD

Preparations are now being made to publish the new, Eighteenth Edition of the *American Medical Directory*. The last edition of the Directory was issued late in 1942. Since that time, it has been impossible to publish a new edition because of wartime restrictions and the shortage of paper and labor.

About November 15, a directory card will be mailed to every physcian in the United States, its dependencies, and Canada, requesting information to be used in compiling the new Directory. Physicians receiving an information card should fill it out and return it promptly whether or not any change has occurred in any of the points on which information is requested. It is urged that those physicians also fill out the right half of the card, which information will be used exclusively for statistical purposes. Even if a physician has sent in similar information recently, mail the card promptly to insure the accurate listing of his name and address. There is no charge for publishing the data nor are physicians obligated in any way.

The Directory is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States. In it, as in no other published directory, one may find dependable data concerning physicians, hospitals, medical organizations and activi-

ties. It provides full information on medical schools, specialization in the fields of medical practice, memberships in special medical societies, tabulation of medical journals and libraries, and, indeed, practically every important fact concerning the medical profession in which anyone might possibly be interested.

Therefore, should any physician fail to receive one of these Directory Information cards by December 10, he should write at once to the Directory Department requesting a duplicate card be mailed.

THE SALVATION ARMY VERSUS LEPROSY IN INDIA

A Salvation Army press release of last September described the extensive work done by the Salvation Army in organization of leprosy hospitals in India during the past fourteen years. Three leprosaria, caring for about 900 patients, have been established, and more are contemplated.

The release contains some odd misstatements. For example, it is said that "the myth that leprosy is an incurable disease has been eliminated"—a somewhat more vigorously optimistic view than most students of the disease are willing to permit themselves. The reasons given for this elimination are really extraordinary, however: (1) "it has been found that if the disease is discovered early enough, patients can be cured," and (2) "treatment in use in India . . . was . . . the intramuscular injection of chalmuga (chaulmoogra) oil." The early discovery of leprosy has until recently been about as helpful, so far as the *patient* is concerned, as the early discovery of a fire in your house when you have no extinguishers, no water, and no fire department. And most leprologists who believe leprosy curable would insist on treatment with the sulfones and not with "chalmuga" oil.

Major Plummer, who has been doing this work in India, subscribes to the Carville patients' view that changing the name of the disease will change people's attitude toward it; and she urges, with them, that leprosy be called "Hansen's disease." This of course would be effective for just so long as it took people to find out what was meant by "Hansen's disease," and no longer. A rose by any other name . . .

A remarkable degree of freedom appears to be permitted in regard to isolation precautions: the statement is made that there is "no segregation of patients in the leprosaria from contacts with relatives or people from the outside world," and that "close relatives *or children* of patients (are allowed) to live in separate buildings near the compound *so there can be regular family intercourse.*" This is difficult to reconcile with the general feeling that children are highly susceptible to infection.

But these criticisms, potentially serious though some of them may be, do not detract importantly from the praise due this great charitable organization for the pioneer work it is evidently doing in one of the biggest, wealthiest, and most poverty-stricken countries in the world. The medical centers they have established and are maintaining will continue to be vital factors in the world-wide campaign to eradicate leprosy through the combined forces of natural immunization of the human race, isolation, and—now—effective chemotherapy.

"ESSENTIALLY NEGATIVE"

Of all the many substitutes for thinking that a lazy man can lay his hand to, the phrase "essentially negative" is one of the most deplorable. What does "essentially" mean? What does "negative" mean? What do they mean when you put them together? They mean something like this: "I'm not just sure what I was looking for, or what I expected to find; but I didn't see or feel anything that seemed important to me at the time." The phrase is really a weasel way of saying "normal" without actually committing oneself to it.

"The urine was essentially negative." A literal-minded man might think that meant there was no urine; an extremely impressionable one might interpret it to mean that a complete urinalysis had been done and that all the findings were within the normal limits. The question as to what examinations were made is not answered, however; and moreover, there is the sneaking implication in the word "essentially" that perhaps there were some abnormal findings, but if there were, they were not regarded as relevant to the case under discussion.

"The chest was essentially negative"—but how carefully was it examined? "EENT—essentially negative"—but was an ophthalmoscopic examination made? Were the pupils compared as to size? Were the drum membranes looked at? Was transillumination of the para-nasal sinuses carried out? Were dental fillings of different metals in contact with one another? How much more informative it would be to have recorded positive findings, and the outstanding and important, or especially pertinent, negative findings, regarding the "E," "E," "N," and "T" individually!

A man who can get over thinking that "essentially negative" means something worth saying has made some progress toward growing up, mentally and professionally. Not a lot, maybe—but some!

CASE REPORTS

THE TREATMENT OF CORD BLADDER BY TRANSURETHRAL RESECTION OF THE BLADDER NECK

Kyril B. Conger, M.D. and
Ralph B. Cloward, M.D.

The literature is both confused and voluminous on the classification and pathological physiology of the various types of cord bladders. The most progress in the treatment of the cord bladder has been made when the physician has considered it as a urological drainage problem rather than from the neuroanatomical viewpoint.

Recently Emmett,[1] Thompson[2] and Bumpus[3] have reported a series of cases which seem to substantiate the following working concepts of the neurogenic (cord) bladder:

1. After the initial period of spinal shock, in which the bladder is flabby and atonic, it regains its tone and becomes a hypertonic, spastic organ, providing proper drainage is supplied. This hypertonicity depends on the presence of an uninterrupted spinal cord reflex arc below the level of damage to the spinal cord.
2. Despite this hypertonicity, these bladders usually have a large amount of residual urine, which is responsible for the patients' urosepsis as well as for their incontinence. The incontinence is not due to a sphincteral paralysis, but is a paradoxical or overflow incontinence caused by the muscular contractions of the bladder trying to empty itself of residual urine.
3. A perfectly logical explanation of the presence of residual urine despite hypertonicity of the bladder is obstruction at the vesical neck. This obstruction has been observed cystoscopically in many cases by the writers mentioned above, and others. It is due to a hypertonic, spastic, internal vesical sphincter with varying amounts of superimposed scar tissue. The internal sphincter is spastic because it represents the circular border of the entire detrusor mechanism of the bladder, which is also in spasm.
4. By resecting the internal sphincter and any accompanying scar tissue or prostatic hypertrophy with a resectoscope, many patients are dramatically improved. The automatic reflex contractions now empty the bladder completely or nearly completely, and the urosepsis dependent on infected residual urine disappears. Patients can often stay completely dry by initiating emptying contractions at regular intervals.

The most obvious defect in the foregoing postulates lies in the work of Prather,[4] who carried out urethrographic studies on a number of patients with cord bladders. When the urethra and bladder neck were filled with radio-opaque dye the urethrograms showed dilatation of the bladder neck rather than spasm.

This contradiction of evidence may be explained by two points: First, Prather's urethrograms were carried out on the resting, empty bladder, in which no spasm of the detrusor or vesical neck would be expected. In many cases, as Thompson has pointed out, the contraction ring at the internal sphincter does not appear until the bladder is filled. Secondly, spasticity of the internal sphincter may not be a universal characteristic of cord bladders, but may appear only in certain cases and at certain times. Possibly long continued catheter drainage, with accompanying urethritis and prostatitis, causes spasm and scar in the internal sphincters of cord bladders just as it can in normal ones. Patients with cord bladders who urinate normally (and many do) may represent the cases in which this chain of events has not occurred.

We have thought it worthwhile to report the following case of partial transverse lesion of the cauda equina region with cord bladder. The cord bladder was cured symptomatically by transurethral resection of the bladder neck and prostate.

Case Report

P. C., a Puerto Rican man, age 49, was first seen in the office of one of us (R. B. C.) on March 4, 1939, with a chief complaint of impotence, which had become increasingly noticeable during the preceding year. He also complained of weakness of his feet and ankles of eight years' duration, combined with numbness of the outer surfaces of both legs. During the preceding year he had wet the bed frequently and was increasingly constipated.

Neurological examination revealed the following pertinent findings: The changes in sensation were confined to the lower extremities. There was moderate hypalgesia and tactile hypesthesia bilaterally over all the sacral dermatomes. The genital and perianal regions were completely anesthetic. Deep pain sensation was absent in the Achilles tendons and testes. There was marked atrophy of the leg muscles below the knee. Both anterior tibial muscles were strong, but the peroneal and gastrocnemius muscles on both sides were weak and flaccid. The toes of the left foot could not be moved voluntarily. Ankle jerks and hamstring reflexes were both absent.

The clinical impression from this examination was a cauda equina tumor or tabes dorsalis. The patient, however, refused to enter the hospital or to have a lumbar puncture, and disappeared for five years.

He returned in May, 1944, with exaggeration of all symptoms and neurological findings. He was having great difficulty at that time in emptying his bowel and bladder, and consented to enter the hospital. X-rays of the spine revealed narrowing of the intervertebral space between the fourth and fifth lumbar vertebrae, with moderate bony proliferation, giving the impression of a

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[1] Emmett, J. L.: Further observations in the management of cord bladder by transurethral resection, J. Urol. 57: 29, (Jan.) 1947.

[2] Thompson, G. J.: Cord bladder: restoration of function by transurethral operation, U.S. Naval M. Bull. 45: 207, 1945.

[3] Bumpus, H. C. Jr.: Transurethral resection and the paraplegic, J. Urol, 57: 300, (Mar.) 1947.

[4] Prather, G. C. and Petroff, B.: Spinal cord injuries; urethrographic study of the bladder neck, J. Urol. 57: 274, (Feb.) 1947.

collapsed intervertebral disc. The blood and spinal fluid Wasserman reactions were negative.

On May 19, 1944, an exploratory laminectomy of the fourth and fifth lumbar and first sacral vertebrae was made. The dural sac did not pulsate, and a nodular mass could be palpated through the intact dura. Upon opening the dura mater, an extensive arachnoiditis of the cauda equina was encountered. This was found to have resulted from a massive herniation of the intervertebral disc between L-4 and L-5, severely compressing the nerve roots and dural sac at this level. The disc was curetted out, and the bony spurs chiselled off the vertebral bodies. The adhesions of the cauda equina were dissected as free as possible, and the wound closed.

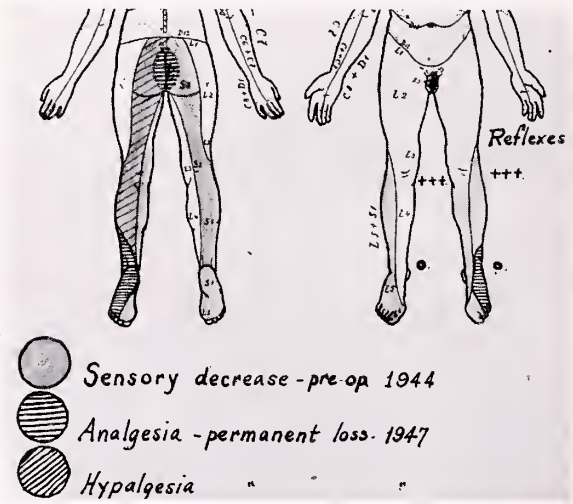


Fig. 1. Chart showing neurological changes.

Following the laminectomy, his neurological disease improved gradually to the point shown on the chart of the examination of April 30, 1947 (Fig. 1). However, his urinary symptoms did not improve, and he was seen by one of us (K. B. C.) in urological consultation in September, 1946.

At that time his chief complaint was an inability to urinate without sitting down on the toilet and massaging his bladder vigorously. After waiting one or two minutes, this would result in a poor, dribbling stream. He also had constant incontinence of urine, both day and night.

Examination revealed the neurological changes in Fig. 1, and 15 ounces (450 cc.) of residual urine. A cystometrogram showed a curve typical of an atonic neurogenic bladder, with no ability to differentiate between heat and cold. There was a maximum intravesical pressure of only 18 cm. of water at a capacity of 400 cc. Cystoscopy and panendoscopy revealed a contracture of the vesical neck with a spastic internal sphincter. There was minimal early trilobar hypertrophy of the prostate gland, which the cystoscopist felt was playing a minor role as a factor in obstruction. There was trabeculation of the bladder, with two large-mouthed diverticulae.

It was felt that this patient had an atonic neurogenic bladder secondary to the transverse lesion of the cauda equina. The reason for atonia rather than spasticity of the detrusor was thought to be due to long continued vesical neck obstruction. A transurethral resection of the internal sphincter and prostate were thought to be indicated.

On September 12, 1946, transurethral resection was carried out with removal of the vesical neck contracture, internal sphincterotomy, and removal of the prostate gland. A total of 9 grams of tissue was obtained. The patient was grossly incontinent when the Foley catheter was removed on the third postoperative day, but was beginning to regain control of urination at the time he left the hospital on the seventh postoperative day.

This patient has been followed in the offices of both of us since discharge from the hospital. At the present time, seven months following transurethral resection, he is voiding a good, strong stream with great ease, with no incontinence whatsoever. He has a urinary frequency of about 4 to 5 times during the day and twice at night. His bladder tone is excellent. There is no residual urine, and no abnormalities in the urine specimen to gross or microscopic examination.

Comment

"An ounce of prevention is worth a pound of cure." The serious disabling of the lower extremities and bladder of the patient described above might have been prevented had the neurological lesion been recognized and removed at the onset of symptoms. A ruptured intervertebral disc can cause serious permanent disability if not recognized and removed early. This has been described by Dandy,[5] Verbruggen[6] and others, and should be stressed.

The patient described herein represents a case of permanent bladder paralysis due to a destructive lesion of the cauda equina. He had received the maximum expected benefits from surgical treatment of this primary lesion during a postoperative period of two years. There remained, however, the serious symptoms of incontinence and urinary residual due to a high degree of bladder obstruction. The slight amount of prostatic hypertrophy was thought to be insignificant as an etiological agent. The patient was completely cured of his distressing urinary symptoms by resecting the internal sphincter of the bladder neck.

Summary and Conclusions

A case of ruptured intervertebral disc with serious destruction of the cauda equina and resultant cord bladder is described.

Surgical removal of the primary lesion failed to improve the urinary symptoms.

Incontinence and urinary residual were completely relieved by transurethral resection of the internal urethral sphincter.

In all cases of bladder disfunction due to spinal cord disease, obstruction at the vesical neck should be looked for and corrected if present.

[5] Dandy, W. E.: Serious complications of ruptured intervertebral discs, J.A.M.A. 119: 474, (June 6) 1942.

[6] Verbruggen, A.: Massive extrusions of lumbar intervertebral discs, Surg. Gynec. & Obst. 81: 269, (Sept.) 1945.

POST-GRADUATE LECTURES

V. SOME DISEASES ASSOCIATED WITH CHANGES IN THE WHITE BLOOD CELLS*

CYRUS C. STURGIS, M.D.

There are many diseases in which important changes occur in the white blood cells, but the present discussion will be limited to three of them, namely, infectious mononucleosis, agranulocytosis and leukemia.

INFECTIOUS MONONUCLEOSIS

This condition may be defined as an acute infectious disease, usually occurring in infants, children or young adults, characterized by enlarged and tender lymph nodes, the presence of atypical lymphocytes in the circulating blood, and the development of agglutinins (heterophile antibodies) for sheep's red blood cells. Its cause is unknown, but the possibility that it might be due to a filtrable virus must be considered although convincing proof of this is not available. In my experience it is most unusual to observe the condition in patients over 35 years of age, but reliable reports have indicated that in rare instances even elderly persons may have the disorder. It should be kept in mind, however, that the diagnosis of infectious mononucleosis in a person over 35 years of age should be viewed with suspicion.

The condition usually persists for several weeks and varies in intensity from the mildest type, with minor upper respiratory symptoms which do not confine a patient to bed, to the severest variety, which simulates a profound infection, such as typhoid fever. In almost all cases there is complete recovery without complications.

The Importance of Infectious Mononucleosis

If it is a disorder for which there is only symptomatic treatment, and from which all patients recover, almost without exception, one might ask why it is of such importance to all physicians. The following reasons are given in answer to this question.

1. In the first place it has a *high incidence* in the age groups mentioned. Often the true nature of the condition is not recognized, and hence, in the presence of the usual prolonged convalescence, characterized chiefly by asthenia, the physician is embarrassed because the patient and the family cannot understand why so much time is required to recover from what was thought to be a mild attack of the "flu." Furthermore, the patient may relapse after having made a complete or partial recovery. If the condition is recognized at the onset and the patient and family warned that it is one from which recovery will undoubtedly occur but also one which is characterized by a prolonged convalescence of several weeks, and occasionally a relapse, the situation will be much more satisfactory for the patient, the family and the physician.

2. Infectious mononucleosis may present a most puzzling *diagnostic problem,* which at times will tax the diagnostic acumen of the most experienced clinician. I have seen patients in whom the presenting symptoms simulated rather closely leukemia, influenza, poliomyelitis, meningitis, diphtheria, septic sore throat, agranulocytosis, typhoid fever, acute hepatitis, tuberculosis, and other diseases. It may present features resembling as many other syndromes as any disease with which I am familiar.

One reason why the diagnosis may be so difficult is because the patient is often first seen during the initial week of the illness. At this time the distinctive features of the condition, such as the enlarged and tender *lymph glands,* the *atypical lymphocytes* in the circulating blood, and sheep cell agglutinins (*heterophile antibodies*), may be absent.

3. This disease is not infrequently *mistaken for leukemia.* This, of course, is a most serious and regrettable error, as all persons with this disease succumb, whereas those with infectious mononucleosis survive. It is not surprising that the two maladies should be confused, for in each there are enlarged glands and atypical lymphocytes in the circulating blood; and in a certain proportion of patients with each condition, the spleen is palpable. *Opposed* to the diagnosis of leukemia, however, is the *lack of an anemia;* the exceedingly *rare occurrence of a reduction in blood platelets* with purpura which is commonly present in leukemia, especially the acute types; the *presence of a positive heterophile antibody reaction;* a white blood cell count which is *not often above 20,000* per cubic millimeter; and the presence of the *distinctive cells* of infectious mononucleosis. These cells differ definitely from the lymphoblasts of lymphatic leukemia, but there is a superficial resemblance which is misleading to those who have not had considerable experience in the recognition and positive identification of abnormal white blood cells in the circulating blood. Almost every year we have several patients referred to us at the Simpson Memorial Institute with the diagnosis of leukemia, in whom, fortunately, it is discovered that the condition is infectious mononucleosis. It should be kept in mind, therefore, when the diagnosis of lymphatic leukemia in a child or young adult is considered, that this benign disease may simulate it closely.

4. Infectious mononucleosis may be *confused with an abdominal condition* of the type that usually demands immediate surgical attention, such as an acute appendicitis. It should be emphasized that *abdominal pain* is present as the most conspicuous clinical feature in 18 per cent of all patients with the disease. More than once have such patients been referred to the surgeon, and in some instances subjected to an appendectomy. In some such patients there has been a definite infiltration with the typical lymphocytes of the disease in the appendix and adjacent tissues. This is not uniformly true, and hence the basis for the abdominal pain is not always entirely clear, although some have assumed that it may be due to tension on the capsules of the enlarged abdominal lymph glands. In order to avert such an unnecessary operation the possibility that the patient may have infectious mononucleosis should always be kept in mind, especially in children and young adults with abdominal

* From the Department of Internal Medicine, University of Michigan. Transcript of a lecture given before the Honolulu County Medical Society on May 8, 1947.

Part 5 of the series. Parts 6 and 7 will appear in the next issue. A limited number of reprints of the entire series of lectures will be available at cost (25 cents each or $1.00 for the series) on application to the Honolulu County Medical Society.

pain. The absence of outspoken abdominal signs and the presence of enlarged and tender lymph glands in the cervical region, and in some instances slight but generalized glandular enlargement, along with the changes in the blood and a positive heterophile antibody reaction, should indicate the correct diagnosis.

5. Of greatest value in the diagnosis of the disease is the heterophile antibody reaction which was recognized as positive in this condition by Paul and Bunnell in 1932. They observed that antibodies in high titer occurred in the sera of patients with this disease which agglutinated sheep's cells. It was shown that this reaction occurred in a great majority of patients with the disease and that it has sufficient specificity to be of great diagnostic importance.

6. It is known that the serum of patients with infectious mononucleosis will give a positive serologic reaction for syphilis in between 18 and 20 per cent of the cases. All such tests give about the same percentage of positive reactions. It should be kept in mind, in evaluating the importance of such a reaction in a patient, that the false positive reaction usually persists for only a few days to few weeks, but occasionally it may be present for as long as several months. As serologic premarital tests are required by law in a number of the states at present it is exceedingly important to keep the possibility of the presence of a false positive reaction in mind should it occur under these circumstances.

The Diagnosis of Infectious Mononucleosis

The recognition of this condition should be based on three types of information, *of which at least two must be present before the diagnosis can be accepted.* They are: (1) The *clinical picture* as evidenced by fever, sore throat or other manifestations of an upper respiratory infection, and enlarged tender glands; (2) The presence of a positive *heterophile antibody reaction* in a titer of 1:16 and preferably higher [it will vary with the method used—Ed.]; (3) The characteristic *atypical lymphocytes* in the circulating blood.

During the first week of the illness in an appreciable percentage of patients, perhaps only fever and the symptoms of mild upper respiratory infection may be present. If there is no other basis for the symptoms, then the possibility that the patient might have infectious mononucleosis must be considered, the blood examination repeated, and the heterophile antibody reaction determined at intervals of every few days. It is helpful to inquire if other children or young adults of the family or among their acquaintances have had a similar condition. In some instances another child who is supposedly well and with negligible complaints will be found to have enlarged and tender glands and all other signs of the disease.

It is apparent, therefore, that the manifestations of infectious mononucleosis are exceedingly diverse and a number of important diseases may be simulated closely. The following suggestions are helpful when considering this diagnosis: (1) Incorrect diagnoses are usually eliminated by a sufficient period of observation; (2) The condition is almost always limited to infants, children and young adults; (3) Generalized lymph gland enlargement, atypical lymphocytes in the circulating blood, and a positive heterophile antibody reaction may be delayed for the first week of disease but eventually at least two, and usually all three of the criteria will be present; (4) The disease tends to appear in minor epidemics, hence the examination of other children in the household or neighborhood will often reveal other cases which lend support to the diagnosis of infectious mononucleosis.

Prognosis and Treatment of Infectious Mononucleosis

Usually the average course of the disease is from ten days to two weeks, followed by a convalescent period of 2 to 3 weeks, at which time the only remaining symptom is asthenia. Never in my experience has the disease proved fatal, although at least three fatal cases have been reported in the literature. In each instance this has been due to rupture of the spleen, either spontaneously or following slight injury.

Some patients may recover completely and then after an interval of several weeks suffer a relapse. Although the abnormal lymphocytes usually disappear from the circulating blood within a few weeks, they have been known to persist for several months. It is also true that the heterophile antibody test may continue to be positive and the lymph glands remain enlarged for several months.

There is no specific treatment for the condition, but it is known that the more severe manifestations may be avoided if bed rest is insisted upon early in the course of the disease. It is known that penicillin, the sulfonamides, and convalescent serum from a recently recovered case, are of no particular value. As Vincent's organisms are frequently secondary invaders in the mouth and throat, hydrogen peroxide, one-half strength, may be employed advantageously, otherwise symptomatic treatment only should be employed.

AGRANULOCYTOSIS

Agranulocytosis may be defined as an acute febrile disease characterized by a striking reduction in the granulocytes of the circulating blood, probably due to a maturation arrest of the granulocyte-forming cells in the bone marrow. The condition is practically always due to the abnormal reaction of an individual to some drug. An outstanding clinical feature is the necrotic lesions in the throat and oral cavity and also, at times, other mucous surfaces. The red blood cells and platelets are not materially altered; hemorrhagic manifestations are rare; there is no hepatomegaly or splenomegaly; and only local lymphadenopathy associated with sepsis.

It seems to be reasonable to assume that the disease occurred occasionally before 1902, but it was in that year that Philip King Brown of San Francisco described the first case with complete blood studies and a necropsy. It was not until 1922, when Werner Schultz in Germany described 5 fatal cases in women, that the disorder became generally known. The first case reported in the United States under the name agranulocytic angina, following the description of Schultz in 1922, was that of Lovett in 1924.

The etiology of this condition remained a mystery until the demonstration by Madison and Squier in 1933 that aminopyrine could cause the disease, although two years previously Kracke had suspected that drugs derived from coal tar could be responsible for it. In my opinion, *all instances of true agranulocytosis are due to an idiosyncrasy to some drug.* It must be admitted that it is not possible to prove that such a drug sensitivity is the cause of the condition in every case; but this may be because all of the facts relating to the patient's illness are not known. It has been demonstrated clearly that the following drugs may be responsible for the condition in persons who are apparently sensitive to them: The sulfonamide drugs, including sulfanilamide, sulfapyridine, sulfathiazole, sulfadiazine, and succinyl sulfathiazole;

thiouracil; aminopyrine; gold; arsphenamine; neoarsphenamine, and mapharsen and phenarsen; dinitrophenol; novaldine (sodium phenyldimethylpyrazolon methylaminoethane sulfonate, which is closely related to aminopyrine); causalin (a preparation made up of approximately equal parts of aminopyrine and hydroquinone).

It is recognized, of course, that only in occasional instances do these drugs cause agranulocytosis, for countless doses of them have been given without untoward effects. The possibility, however, that they *may* cause the condition should be kept in mind. If a patient develops evidences of the syndrome, then careful inquiry should be made concerning the use of such preparations. Of the entire lot mentioned above, there is evidence to indicate that aminopyrine or "Pyramidon" is more likely to cause the condition than any of the others. Additional drugs which may be etiologic factors in the disorder, but about which conclusive proof is lacking, are as follows: the barbiturates, antipyrine, phenacetine, neostibosan, quinine, cinchophen, bismuth, Nirvanol (phenyl ethyl hydrantoin), and plasmoquin.

Treatment and Prognosis of Agranulocytosis

The mortality from agranulocytosis, when the cases were first observed in this country and recognized as a definite disease entity, was appalling. It amounted to about 75 per cent, as no effective form of treatment was available. Later, when it was discovered that the condition was due to a drug sensitivity, the removal of the responsible etiological agent and the administration of pentnucleotide, which was perhaps of some value, caused the death rate to diminish somewhat; but it was still high.

With the information which is now at hand concerning the disease, it is probably correct to state that *not a single patient should die of this condition,* provided (1) the patient is not in extremis; (2) all drugs which might possibly cause the condition are discontinued promptly, and (3) penicillin is administered first in a single dose of 100,000 units intramuscularly, followed by 40,000 units or more, depending on the condition of the patient, every three hours. The rationale of administering penicillin is to combat the sepsis which is invariably the cause of death. Sepsis results because the total number of neutrophils in the body are reduced to nil or a small fraction of normal. Consequently the first line of defense against infection is reduced or eliminated, and as a result the pathogenic bacteria which are constantly present on the mucous membranes of the mouth and throat, and also the vagina and rectum, may invade the tissues and eventually cause a fatal septicemia unless effective treatment is instituted early in the course of the disease.

Every physician should keep in mind, therefore, that when a patient presents the picture of an infection which involves the mouth and throat, there is a possibility that the condition is agranulocytosis. This can be confirmed by a white blood cell count and a determination of the percentage of neutrophils, which is always below 50 per cent, if the disease is present, and usually below 20 per cent; or they may be entirely absent.

LEUKEMIA

Leukemia is a fatal disease which is probably neoplastic in nature. It arises primarily in the blood-forming organs and is characterized by an extensive and abnormal proliferation of the white blood cells and their precursors, with infiltration into the various tissues of the body, especially the bone marrow, spleen, and lymph nodes. Eventually, in all cases, immature white blood cells appear in the circulating blood, frequently in great numbers, and in most cases there is an associated anemia, often of a severe degree.

Symptoms and Signs

It is not my intention to enter into a detailed discussion of the clinical picture of the various types of acute, subacute and chronic leukemia. I should like to emphasize, however, that in chronic leukemia there are several symptoms which are common to all types. They are, first, those of *anemia,* namely, weakness, ease of fatigue, pallor, dyspnea on exertion and palpitation. Second, the presence of a dull dragging pain in the upper left quadrant of the abdomen or the observation by the patient that there is a bulge there due to the *enlarging spleen;* this is more commonly present in patients with chronic myelogenous leukemia. Third, in those with chronic lymphatic leukemia, the initial manifestation may be the chance detection by the patient of a non-tender, painless, *enlarged lymph node.* Fourth, there may be *purpuric spots* in the skin and bleeding from the mucous membranes. Such evidence of a hemorrhagic diathesis may develop in any form of leukemia, but it is likely to be present in the more acute types, or in an acute exacerbation of a chronic leukemia. Fifth, as leukemia is not infrequently associated with an increase in the basal metabolic rate, there may be a considerable *loss of weight.* Often also there is fever and anorexia which may contribute to this.

Acute leukemia usually occurs in childhood and young adult life. The onset is almost always abrupt with symptoms which resemble a severe acute infection, namely, high fever, malaise, headache, generalized aches and pains, and prostration. There is often a rapidly developing anemia with extreme pallor, and purpuric manifestations with bleeding into the skin and from the nose and mouth. There is nothing about the clinical picture which is distinctive. It resembles a fulminating infection, and the true nature of the condition is often not suspected until the rapidly developing pallor with purpura suggests a blood examination which reveals the true nature of the illness.

The Classification of the Leukemias

It is possible to classify the leukemias according to several different criteria. All types of the disorder may be considered as *acute, subacute* or *chronic;* as *leukemic* or *subleukemic,* depending on whether the white blood cell count is elevated above normal (10,000 per cubic millimeter); and as *myelogenous, lymphatic, monocytic, lymphosarcoma cell,* and a number of other exceedingly rare types. If no attempt is made to consider the rarer varieties, the per cent of the more common types in our series of almost 1,000 cases were as follows: lymphogenous 43.6 per cent, myelogenous 48.3 per cent; and monocytic (Schilling) type 8.1 per cent. Lymphosarcoma cell leukemia is commonly grouped with the lymphatic variety, but this is unwarranted for two reasons: (1) because it can be differentiated by means of a blood examination; (2) it has a different prognosis, as patients with the condition usually do not survive for more than one year after the onset of symptoms. Careful exclusion of this variety from the lymphatic leukemia group results in an average duration of life in the latter disease of between 5 and 6 years from the onset of symptoms.

The incidence of the various types of leukemia in the two sexes and the frequency with which it occurs at different ages may be summarized as follows: acute leukemia is most commonly observed in childhood and adoles-

cence; myelogenous leukemia is the predominating type of the chronic disease until the age of 60 years, after which time the lymphatic variety is more frequently encountered. Chronic monocytic leukemia is most commonly found between the ages of 30 and 60 years. Lymphosarcoma cell leukemia has no definite predilection for age in females, but in males it occurs more commonly before the age of 20 years and after the age of 60 years. In general it may be said that leukemia is observed somewhat more commonly in males than females but there is no known explanation for this.

The Prognosis and Treatment of Leukemia

Leukemia is an invariably fatal disease. In the few patients listed in the literature as having recovered, the diagnosis has undoubtedly been confused with infectious mononucleosis, or some condition such as whooping cough or acute lymphocytosis in childhood, which is associated with a striking increase in the number of lymphocytes. On the other hand, I have seen some patients survive for an amazingly long period of time. One physician I observed is known to have had unquestioned lymphatic leukemia for a period of over 23 years. Another of my patients with myelogenous leukemia has survived at least 10 years. On the other hand, the average duration of life of a patient with chronic myelogenous leukemia from the onset of symptoms is between 2 and 3 years; one with chronic lymphatic leukemia between 5 and 6 years; with monocytic leukemia between 1½ years and 2½ years; with lymphosarcoma cell leukemia usually less than 1 year, although I have a patient now with this type of leukemia who has survived in comparatively good health for 6 years, though he now seems to be approaching the terminal state. All forms of acute leukemia, with few exceptions, terminate fatally in a few weeks to six months.

It should be emphasized, however, that—now that more routine blood examinations are made—an increasing number of patients with leukemia will be observed who have changes in the blood but are without symptoms. The pre-symptom stage of the disorder, therefore, must be taken into consideration when a prognosis is formulated. There is an inadequate amount of information available to determine how long such an asymptomatic state continues, but as an estimate I would say about an average of two years.

Treatment of Leukemia

The various forms of therapy for this condition may be divided into two types, namely, those of proven value and those which are possibly effective but require further study before a final answer can be given concerning their place in the treatment of the disease. Those of proven value are: (1) *irradiation* with the roentgen ray, radium, and radioactive isotopes such as radioactive phosphorus (P_{32}); (2) the use of *blood transfusions;* (3) *arsenic.* Those of possible value may be listed as follows: (1) the nitrogen mustards, (2) urethane.

Irradiation

It has been established by long observation of many patients with leukemia that the roentgen rays are highly effective in reducing the white blood cell count to normal and controlling symptoms in patients with the chronic forms of the disease. In my opinion, not only are the patients relieved of symptoms but life is definitely prolonged, although not for any great length of time. Our studies show that irradiation is effective in causing a good or excellent result in 90 per cent of patients with chronic myelogenous leukemia in whom treatment had not previously been given, in 84 per cent of patients with chronic lymphatic leukemia, in 67 per cent with chronic histiomonocytic leukemia, in 59 per cent with myelomonocytic leukemia, and in 33 per cent of those with chronic lymphosarcoma cell leukemia. It is of *no value whatsoever* in patients with *acute* leukemia, and may actually do harm.

I will not discuss irradiation therapy except to make the following three points: (1) the roentgen rays are as effective as radium or radioactive elements, and hence the practitioner is not depriving his patients of a valuable form of therapy if it is not possible to employ radioactive phosphorus; (2) there is a commendable tendency to reduce the roentgen ray dosage to the smallest possible amount which will produce the desired effect; (3) patients should not be permitted to relapse too far before x-ray treatments are given. In my opinion roentgen therapy is usually indicated: (a) with an increase in the severity of the associated anemia; (b) with the development of symptoms referable to the spleen or lymph glands; (c) with a progressive loss of weight; (d) when the white blood cell count is above 40,000 per cubic millimeter; (e) with increasing fatigue; and (f) with the development of hemorrhagic manifestations. It should be stated, however, that too much emphasis should not be placed upon any one manifestation as a guide to therapy. *The decision must be based upon all of the possible indications for treatment, the presence or absence of the contraindications, and the general condition of the patient.*

There are only two absolute *contraindications* to the use of irradiation in my experience. They are (1) the presence of a *leukopenia,* and by that I mean a white blood cell count of 6,000 per cubic millimeter or less; and (2) the presence of *acute leukemia.* It should be kept in mind, however, that the roentgen ray should be used with *caution* when the white blood cell count is *below 40,000* per cubic millimeter, when there is a *hemorrhagic tendency,* and when a severe *anemia* is present. It is usually wise in the presence of the last two conditions to give several blood transfusions before the roentgen therapy is administered.

Blood Transfusions

In the past there has been too much of a tendency to disregard the anemia associated with leukemia until it has progressed to a severe degree. There is no excuse for this, now that blood transfusions may be given with such ease as the result of the establishment of blood banks in many large hospitals. Furthermore, the number of transfusions should not be limited to one or two, but a sufficient number should be given, usually every other day, or every day if the indications are urgent, until the red blood cell count and hemoglobin content of the circulating blood are *within normal limits.* The main indications for giving blood transfusions to patients with leukemia are as follows: (1) the presence of a hemoglobin of 70 per cent or less (11.0 grams of hemoglobin per 100 cc. of blood) or a red blood cell count below 4.0 million per cubic millimeter; (2) in the presence of a hemorrhagic tendency, which is almost always associated with a reduction in the number of circulating blood platelets (*fresh blood* should be used for this purpose as the platelets agglutinate in bank blood and probably are functionally inefficient); (3) when infections of the mucous surfaces are present and are not readily controlled with mouth washes of dilute hydrogen peroxide, sulfonamide drugs or penicillin.

Arsenic as a Therapeutic Agent

For many years arsenic has been employed in the treatment of various forms of leukemia, especially the myelogenous variety. It sometimes produces satisfactory results if the dosage is increased to the tolerance of the patient. The preparation of choice is Fowler's solution (solution of potassium arsenite, U.S.P.) which should be given in an initial dosage of 4 to 5 minims of (0.25 to 0.3 cc.) three times daily. It is best administered well diluted in fruit juice and must be taken immediately following meals. The dosage should be gradually increased to the point of tolerance, which in some patients may be as much as a total of 40 minims per day. It should be kept in mind that the toxic manifestations may be disturbing, and are an indication for the immediate discontinuance of the drug, resuming it, only after all evidences of toxicity have disappeared, in a smaller dosage. The main acute toxic symptoms are conjunctivitis, nasal congestion and gastro-intestinal disturbances. Other more serious chronic ones are precancerous keratoses, cirrhosis of the liver, and neuritis. It has been recommended by some that the drug should be given only for a period of 21 days, followed by a similar interval of rest, in order to help avoid the untoward effects.

My opinion is that arsenic is inferior to irradiation in the treatment of leukemia. I have not found it to be efficacious when such patients have become refractory to the roentgen ray, although some observers have reported otherwise. It can be given a cautious trial if the facilities for roentgen ray treatment are not available, or if the patient no longer responds to this therapeutic agent.

New Forms of Treatment Which are Being Evaluated

Nitrogen mustard (Methyl-bis [beta-chlorethyl] amine hydrochloride) has been employed as a chemical agent in the treatment of Hodgkin's disease and also in the leukemias, lymphosarcoma and polycythemia vera. It is of interest to note that significant but relatively brief clinical remissions have been produced in all of these conditions. Furthermore, this therapeutic agent may be effective when x-ray has failed, especially in Hodgkin's disease. It is too early to evaluate finally the place of this therapeutic agent in leukemia, but it has promise and should be investigated further. It has at least two possibilities which are of interest: one, it may prove to be an adjunct to roentgen ray therapy and used in association with it; and, second, additional similar products will undoubtedly be evolved which may prove to be more effective in leukemia. For the present it must be said that the use of this form of treatment is still in the realm of experimental medicine.

In 1946 Paterson, Haddow, Thomas and Watkinson in England treated a group of patients with chronic and acute leukemia with urethane (ethyl carbamate), 1 to 5 grams daily, and compared their results with those attained with x-ray. They concluded that the effects of this drug were strikingly similar to those produced by roentgen therapy in patients with chronic forms of leukemia, but was disappointing in those with the acute types. We have treated several patients with chronic leukemia at the Simpson Memorial Institute with 3.0 grams daily, and have noted some clinical improvement along with a drop in the white blood cell count and a rise in the hemoglobin of the circulating blood. I would characterize our limited experience as sufficiently encouraging to warrant further use of the drug in an attempt to determine its true worth.

COUNTY SOCIETY REPORTS

KAUAI COUNTY MEDICAL SOCIETY

The meeting was called to order by President Donald Depp at 7:30 p.m. on June 18, 1947, at the Wilcox Memorial Hospital. Minutes of the previous meeting were read and approved.

Those present were Doctors Masunaga, Depp, Boyden, Cockett, Toney, and Fujii.

Old Business: On May 31, 1947, the society had a balance of $782.27 in the Bishop National Bank of Lihue, Kauai.

Communications: 1) A letter from Mrs. William Balfour was read, thanking the society for the beautiful flowers received for the funeral of her husband.

2) A letter was read containing the minutes of the special meeting of the Maui County Medical Society for April 14, 1947, stating that the entire membership attended the funeral of Dr. Balfour deceased, president-elect of the society.

3) A letter from Dr. L. A. R. Gaspar of the Honolulu County Medical Society in answer to a previous communication regarding his criticism of the golf tournament was read and filed.

4) A letter from Dr. Robert Faus, president of the Hawaii Territorial Medical Association, dated May 23, 1947, with reference to the appointment of a committee from Kauai Medical Society by the president-elect for Medical Economics and Public Relations was read. He recommended that the president of the Kauai County Medical Society be an ex-officio member of this committee and that he in turn appoint two other members. Dr. Wade and Dr. Boyden were selected.

5) A letter was received from Mrs. Bennett with reference to the awarding of trophies from the McKesson Drug Company and Dr. VanPoole to those tied for the Hawaii Territorial Medical Association golf tournament here on the island of Kauai. It was voted that the secretary answer this letter with the recommendations that each trophy contain the names of the three doctors tied for first place in the golf tournament, and that the trophies be retained at the Hawaii Territorial Medical Association office for safe keeping until the next tournament.

A letter was received from the Territorial Medical Association secretary dated May 19, 1947, with reference to some inactive members of the Kauai County Medical Society. It was moved and seconded that the secretary answer this letter with the following corrections: Dr. Leo Bernstein transferred to Hawaii County Medical Society; Dr. Hon Chong Chang, post-graduate education on the mainland; Dr. A. M. Ecklund, Association guest member; Dr. Wallace S. Kawaoka, post-graduate education on the mainland; Dr. Lawrence Patterson, honorary member; Dr. Alfred H. Waterhouse, honorary member; Dr. V. A. Harl, active member who is ill in Honolulu.

A letter from Dr. James Enright was received with reference to the use of 10 per cent DDT powder in the public schools for the prevention and treatment of pediculosis capitis. It was moved and seconded that the secretary answer this letter with a notation that copy of the questionnaire which is submitted to parents of children with this disease be submitted to the Kauai County Medical Society for inspection.

Letters from the Territorial Board of Health were received and read concerning the licensing of new physicians.

A letter from the Hawaii Territorial Medical Association with regard to the $75.00 assessment of members for the work of the Medical Economics Committee of the Hawaii Territorial Medical Association was received and read.

Minutes of the meeting of the Honolulu County Medical Society and Honolulu County Medical Library dated April 4, 1947, were received and excerpts were read. Minutes of the meeting of Board of Governors dated April 1, 1947, and April 25, 1947, were received and excerpts were read to the members.

Secretary's letter from the American Medical Association dated April 28, May 5, and May 12, 1947, were received and excerpts were read to the members. A letter from Mrs. Bennett, managing editor of the HAWAII MEDICAL JOURNAL, was received requesting minutes of the meeting of April 2 and May 1947.

A letter of resignation from president-elect Donald Depp was read and accepted very sadly by the members.

Bills from the Secretarial Service were received and it was moved and seconded that the secretary make payments for same before next month.

New Business: It was moved and passed by the members that the secretary write a letter to a florist in Honolulu for flowers, with a note attached, to be sent to Dr. V. A. Harl who is ill in Honolulu, with the expressed regrets of the society that he could not attend the Hawaii Territorial Medical Association Convention on the Island of Kauai.

The business about the cost per patient per visit to each of the members of the society was discussed and the average cost was about $2.50. This matter was to be brought up again for further discussion at the next meeting.

Meeting was adjourned at about 9:00 p.m.

* * *

The Kauai County Medical Society met in the Wilcox Memorial Hospital, Lihue, Kauai, on July 9, 1947, at 7:15 p.m. The meeting was called to order by our new president, Dr. William Toney, in the absence of our president elect, Donald E. Depp, transferred to Hawaii County Medical Society. Those present were Drs. Toney, Cockett, Wallis, Boyden, and Fujii. Dr. Horton, Kauai County Health officer, was present as a guest. The secretary read the minutes of the previous meeting and they were accepted as read.

New Business: President Toney appointed a library committee consisting of Drs. Boyden, Liu, and Masunaga to make a survey of journals on hand in the Wilcox Memorial Hospital. They are to report at the next meeting concerning which journals are to be discontinued and which subscribed to.

The secretary was asked to check through past Kauai County Medical meetings for information concerning the status of Dr. Leo Bernstein and was to report to the members at the next meeting.

Communications: The secretary read a letter from Dr. James R. Enright, M.D., Chief, Bureau of Epidemiology, Territorial Board of Health, in answer to the one written to him by the secretary in regard to the treatment of pediculosis capitis in school children. An enclosure consisting of a questionnaire to be sent to the parents of children treated for approval, the plan of examination, treatment, information on the disease, and instructions to principals of schools were included in the letter. Dr. Toney recommended that the Anahola School be submitted for trial of the above plan this fall. No further action taken.

Another letter from Elizabeth D. Bolles was read concerning pediatric studies in which all practicing physicians were to fill out forms sent them immediately. All approved the president's recommendation for immediate action on this vital matter.

The meeting was adjourned at 8:45 p.m.

A movie film on the subject of Folvite, by Lederle Drug Company, was shown to the members prior to the meeting.

* * *

President Toney called the meeting to order on August 13, 1947, at the Wilcox Memorial Hospital at Lihue, Kauai, at 7:30 p.m. Those present were Drs. Kuhns, Wallis, Fujii, Toney, Cockett, and Masunaga. Drs. Goodhue and Horton were also present as guests. The secretary read the minutes of the previous meeting, which were approved with one correction.

Old Business: The report by the library committee as to the journals to be subscribed for was postponed until next week.

Communication: A letter from Dr. Michel Gerundo, pathologist with the Hilo Memorial Hospital, dated July 23, 1947, was read concerning an application for the position of pathologist for the island of Kauai. It was moved that the secretary of the Kauai Medical Society communicate with the secretary of the Hawaii Medical Society as to personal reasons why Dr. Gerundo wants to leave Hawaii—no action taken until next meeting.

A letter from Charles L. Wilbar, M.D., president, Board of Health, dated July 26, 1947, concerning the examination of all blind persons on the island of Kauai by an ophthalmologist was read, and it was moved that the letter, as well as all enclosures pertaining to same, be referred by the secretary to Dr. Webster Boyden.

A letter from Manager Achor of the Kauai Medical Service Association dated August 13, 1947, was read by the secretary with regard to discrepancies arising concerning claims for payment. Dr. Wallis notified the members that the Lanai Plantation Pineapple Medical Plan was to be introduced on the island after approval by the members of the Kauai County Medical Society. The members moved that the secretary communicate with the manager of the Hawaii Medical Service Association asking that the plan be introduced immediately.

Meeting adjourned at 9:00 p.m.

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The meeting of the Kauai County Medical Society was called to order by the President, Dr. Toney, at 7:00 p.m. October 8, 1947, at the Wilcox Memorial Hospital Staff Room. Those present were Drs. Wade, Boyden, Masunaga, Liu, Fujii, Wallis, Toney, and Cockett. Drs. Goodhue and Horton were present as guests. The secretary read the minutes of the previous meeting held in August and same were approved as read. There was no meeting in September.

Communications: A letter from Dr. Burgess was received and read concerning the disposition of the prize for the triple tie incurred in the Hawaii Territorial Medical Golf Tournament held in May, 1947. The Society moved that the secretary send him a copy of a letter written to the president of the Hawaii Territorial Medical Association concerning the decision of the Kauai County Medical Society.

Another letter from Dr. Sexton, secretary of the Hawaii County Medical Society was read concerning Dr. Gerundo's application for the position of Pathologist on the island of Kauai and same was filed as read.

A letter from the president of the Hawaii Territorial Medical Association (Dr. Faus) to Dr. Wallis was read by Dr. Wallis desiring his presence at a meeting of the Council on October 16, 1947, at the Mabel Smyth Building, Honolulu, T. H.

Matters to be brought up at the meeting were:

1. Balloting by those in attendance to determine whether the two doctors who did not pay their 1947 Medical Economics Assessment should be expelled or not from the Hawaii Territorial Medical Association.

2. Plans to organize the Women's Auxiliary of doctors' wives.

The majority of the members of the Kauai County Medical Society were wholeheartedly in favor of the Medical Economics Assessment. The majority of the members of the Society were also in favor of organizing the Women's Auxiliary of doctors' wives.

There was discussion of the ethics of the medical activities on Kauai of the group of Honolulu ophthalmologists who are operating the Kauai Eye Clinic. The secretary was directed to write to the President of the Honolulu County Medical Society about this matter.

The meeting was adjourned at 8:50 p.m.

PATRICK M. COCKETT, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

A dinner meeting of the Maui County Medical Society was held at Paia Hospital Nurses' Cottage at 6:30 p.m., July 12, 1947. Dr. Anderson presided. Drs. Frank St. Sure, Jr., Cole, Underwood, Patterson, Dusendschon, Edward Kushi, Harold Kushi, Tofukuji, Rockett, Wong, Shimokawa, Kanda, Fleming, Rothrock and Hedblom were present.

The main object of this meeting was the presentation of cases by the members of the Paia Hospital staff. The scientific part of the meeting was turned over to Dr. Frank St. Sure, Jr.

Miss H. Wong presented a very interesting paper on Rh factor.

Dr. Anderson presented an unusual case of spondylolisthesis with rupture of intervertebral disc. He also presented two cases of peripheral vascular disorder (Buerger's disease) in which paravertebral sympathectomy was done.

Dr. Harold Kushi presented two cases of cholesteatoma of mastoid of which one case had mastoidectomy seventeen years ago.

Dr. Cole presented an interesting case of which the diagnosis was undetermined. The patient had a flaccid paralysis of both legs.

Dr. St. Sure presented several brief case histories as follows:

(a) Scurvy in a child 4 months old with deformities previously seen by many physicians and diagnosed as lympho-sarcoma, tubercular adenitis, mumps, fracture and Hodgkin's disease. The x-ray of thorax including cervical spine showed calcified area in the mid portion of right clavicle.

(b) A case of imperforate hymen with retention of menstrual blood causing erosion of pubic bone.

(c) Two cases of cervical rib (bilateral) in which the scalenus anticus muscle was severed with complete relief of symptoms.

(d) An unusual case of appendix which was found in left upper quadrant of abdomen.

(e) Acute massive collapse of lung which was misdiagnosed as subphrenic space abscess.

A short business meeting followed the scientific meeting. A letter from Dr. Enright, Chief Bureau of Epidemiology, pertaining to the use of 10 per cent D.D.T. powder for the control of pediculosis capitis was read. The Maui County Medical Society approved its use as outlined by the Bureau of Epidemiology of the Department of Health in conjunction with the Division of Health Education of the Department of Public Instruction.

Drs. Burden and A. Y. Wong were unanimously accepted as regular members of the Society, the former by reinstatement and the latter by application. It was moved and seconded and agreed that Dr. G. H. Lightner be made an honorary member of this Society.

* * *

A dinner meeting of the Maui County Medical Society was held at the Grand Hotel Garden at 6:30 p.m., September 8, 1947.

Dr. Frank St. Sure, Jr. presided; Drs. Beland, Haywood, Dusendschon, Fleming, Cole, Rothrock, Tofukuji, Wong, Harold Kushi, Kanda, Underwood, Shapiro, McArthur, Shimokawa, Patterson, Alford, Burden, Tompkins, and Dunn were present.

The minutes of the July 12, 1947, meeting were approved as read. The treasurer's report was accepted as read. Drs. A. J. Beland, J. I. F. Reppun, and Evelyn Ross were unanimously accepted as members of the Society.

The following committees were appointed by the president:

(a) Library: Dr. Wong, Librarian
(b) Nominating: Dr. Kanda, chairman; Rothrock, and Burden
(c) Program: Dr. Cole, chairman; Harold Kushi, and Tompkins

The question of increasing the fee for secretary's assistant due to increase in secretarial and clerical work was discussed. A motion was made by Dr. Dunn, duly seconded, that this matter be left to the secretary and pay the necessary fee as he sees fit.

General discussion was held on the merits of the 1947 special assessment of $75.00. Several members felt that these leaflets distributed by the Smith, Mansfield Agency were useless due to the fact that they were seldom read, and furthermore, the doctors had difficulty in distributing them. Some felt that lobbying was the answer. The regular weekly radio programs were well presented but very few listened to them. It was suggested by Dr. McArthur that Dr. Robert Faus, who is anxious to be present at one of our meetings, be asked as guest speaker at the special meeting of this Society to iron out many problems pertaining to this assessment.

Following the business meeting, the following sound moving pictures were shown to the members:

(1) Continuous Caudal Analgesia in Obstretrics.
(2) Penicillin, Its Use in Medicine and Surgery.

Meeting was adjourned at 10:30 p.m.

T. W. KANDA, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The Honolulu County Medical Society met in the Mabel Smyth Building on Friday, July 11, 1947. Dr. Hill presided. There were sixty-eight members and guests present.

It was announced that a meeting of the Obstetrical and Gynecological Society would be held on Monday, July 21, 7:30 p.m. at the Mabel Smyth Building.

The following new members were welcomed into the Society: Dr. Jules Magnette, Dr. Teruo Yoshina, Dr. Tetsuo Watanabe, Dr. Harold M. Patterson, and Dr. Bryant M. Wedge. The membership agreed to waive the 1946 assessments of

Drs. P. Wiig and Dougan, and the 1947 assessments of Drs. Allison, Cass and Steffe, all on the ground of either absence from the Territory or retirement.

Dr. F. J. Pinkerton reported on the A.M.A. meeting in Atlantic City.

Mr. Philip Maxwell of the Hawaii Employers Council spoke on "Current Labor Problems." Dwight Steele, originally scheduled to speak on the labor situation, was not able to attend the meeting. Mr. Maxwell explained the objectives of the H.E.C., and discussed the Taft-Hartley bill. He also commented on the present pineapple strike situation in the islands.

Dr. Palma gave the report of the H.M.S.A. He announced that on August 1, the premium rate of the Pineapple Plan would be doubled and certain limitations set on the amount of laboratory work, x-rays, and medicine allowed.

Dr. Hill read a proposed letter to the Board of Supervisors of the City and County of Honolulu, urging the care of the ambulatory indigent sick through hospital-sponsored out-patient clinics. Discussion of the subject followed. Dr. Spencer asked about plans for out-patient clinics at Kapiolani Hospital. Dr. G. A. Batten emphasized the merits of hospital-sponsored out-patient clinics over a city and county hospital. Dr. F. Bernard Schultz explained the necessity of out-patient clinics for interne training. He said that in the future Queen's Hospital cannot compete with teaching hospitals on the mainland for good internes, if the set-up it has now continues.

It was agreed by the membership that the letter urging installation of out-patient clinics in the hospitals for care of the indigent sick be sent to the Mayor and the Board of Supervisors of the City and County of Honolulu, and also to the editors of *The Star-Bulletin* and *The Advertiser* for publication.

About twenty-five members attended the special meeting of the Honolulu County Medical Society on August 27, 1947, in the auditorium of the Mabel L. Smyth Memorial Building.

Dr. Carl Peterson, Secretary of the Council on Industrial Health of the American Medical Association, spoke on "The Physician in Industry." Dr. Peterson explained that the Council on Industrial Health is composed of twelve physicians and is a standing committee of the Board of Trustees of the American Medical Association. The general purpose of the Council is to act as a focus and point of accumulation of information and the dissemination of such information so that the people at large may benefit from these investigations. The Council works in coordination with the specialty boards of the American Medical Association. For instance, its work with the American Board of Ophthalmology includes visual problems and corrections connected with certain jobs as well as the traumatic problems such as the removal of foreign objects from the eye.

The Council is promoting the inclusion of industrial medicine as a part of all medical teaching programs so that the average practitioner can solve industrial problems.

Discussion of the subject of industrial medicine followed.

* * *

About one hundred members and guests, including twenty-three Army Medical Corps officers, attended the regular monthly meeting of the Honolulu County Medical Society on September 5, in the auditorium of the Mabel L. Smyth Memorial Building.

Dr. Harold M. Johnson and Dr. Alfred S. Hartwell reported on current facts presented at the annual convention of the American Medical Association, in the fields of dermatology and internal medicine. Dr. Thomas Fujiwara discussed hypersplenism and Dr. Ralph B. Cloward spoke on the physiological basis for modern treatment of polio.

On recommendation of the Board of Governors, a motion was made by Dr. Arnold, Jr., seconded by Dr. Phillips, and passed, that Dr. Paul Wiig of Reno, Nevada, be excused from payment of the 1947 assessment on the ground of being a non-resident.

Dr. Arnold, Jr. presented for approval a letter from the Society to Mr. Riley Allen, chairman of the local chapter of the National Foundation for Infantile Paralysis. The three main points covered in the letter were as follows:

(1) Recognition of a panel for the diagnosis of polio, composed of members of the American Boards of Pediatrics, Orthopaedic Surgery, Internal Medicine, Neurological Surgery, and Psychiatry and Neurology.

(2) Invitation to three outstanding, generally recognized specialists in diagnosis, epidemiology and treatment of polio to come to Hawaii under the auspices of the National Foundation and conduct a seminar for the doctors.

(3) Adoption of the fee schedule proposed by the Polio Committee and the Fee Schedule Committee.

After some discussion of the quarantine period for polio, the letter was approved.

Refreshments were served on the lanai at the close of the meeting.

* * *

One hundred nine members and guests attended the regular monthly meeting on October 3 at the Mabel Smyth Building Auditorium, at which four new members were welcomed: Drs. Lyle Bachman, Earnest J. Young, Edward T. Matsuoka, Shigeo Shinkawa.

Dr. Arnold, Jr. announced that "Excerpta Medica" will abstract all articles in all medical journals in the world. It will be published in sections. The Medical Library hopes to have all the sections available, but cannot afford to subscribe to them all. Any doctor or group willing to subscribe to one or more sections and turn them over to the Library was asked to notify Mrs. Hill.

The following program was presented by the Staff of the Territorial Hospital:

Dr. Jules Magnette: Treatment of neurosyphilis

Dr. J. Robert Jacobson: Group psychotherapy

Dr. Marcus Guensberg: Sodium amytal interview, diagnostic and therapeutic

Dr. Ralph B. Cloward: Psychosurgery

Brief presentation of two cases

Movies: (*a*) Electroconvulsive therapy
(*b*) Deep coma insulin therapy

Refreshments were served at the close of the program.

S. L. YEE, M.D.
Recording Secretary

HAWAII COUNTY MEDICAL SOCIETY

The 264th regular meeting of the Hawaii County Medical Society was held on September 4, 1947.

Those present were Drs. L. Bernstein, P. Chock, W. T. Chock, L. Fernandez, H. Ireland, W. Loo, S. Mizuire, L. L. Sexton, H. Sexton, W. Seymour, G. Tomoguchi, H. Yuen, T. Strathairn, and Matsumura.

The transfer of Dr. R. T. West to Honolulu was approved. Transfer of Dr. D. Depp from Kauai was also approved. Dr. Miyamoto was unanimously accepted into membership. Action was taken on the above three instances in view of the fact that there was no meeting last month and the applications were in the hands of the secretary over one month.

A letter from Dr. Enright concerning DDT powder for pediculosis capitis was read. His program was approved on motion by Dr. L. L. Sexton, seconded by Dr. Seymour. It was also suggested that the DDT powder be available to doctors and hospitals.

A letter from the National Foundation for Infantile Paralysis was read requesting the appointment of two members of the Hawaii County Medical Society to serve as committee members for the Hawaii Chapter. Dr. H. Crawford and Dr. L. Bernstein were appointed to represent this Society.

Movies on caudal anesthesia were shown following the meeting.

HAROLD M. SEXTON, M.D.
Secretary

REMINISCENCES OF DECEMBER SEVENTH: II

On August 21, 1947, I interviewed Dr. Homer Izumi, who had been connected with the Kula Sanatorium for some time prior to December 6, 1941.

He had come to Honolulu a few days before to complete preparations for moving to Honolulu and was staying with his friend Dr. Harold Johnson.

December 7, 1941, dawned bright and clear, and, highly optimistic about his plans, he packed to return home by the 8 o'clock plane. Dr. and Mrs. Johnson and their son Larry drove him to John Rodgers Airport, arriving there about 7:30. About 10-15 minutes after arriving they noticed clouds of smoke and heard gun fire over the Pearl Harbor area. A few planes were flying in the same vicinity and one was seen to burst into flames and plunge toward Pearl Harbor.

Directly overhead they also noted a flight of planes wheeling and circling in loop formation tat-tat-tatting at each other. In the course of all of its loops this formation swooped down to within about 150 feet of them and they noticed that one of the planes had red dot markers on its wings. Dr. Izumi remarked, "Gee, Harold, that looks like a Japanese emblem!" "Yeh, don't they get realistic nowadays," replied Johnson as he hoisted his boy Larry to his shoulders and said, "Look, Larry, look!"

Immediately after this event the Maui plane was announced and Dr. Izumi boarded it. Waving goodbye to his friends through the plane window, just as they were preparing to take off, he noticed someone running across the landing field, coming from the nearby Andrew Flying Service hangar and shouting something which immediately caused the farewell crowd gathered near the plane to run for their cars. Then the door of the plane was opened and all passengers were asked to get out. Dr. Johnson, who, like the rest of the farewell crowd had started to leave the airport, had returned by the time Dr. Izumi had disembarked. The cause for the sudden excitement was the fatal shooting of a man near Andrew's hangar, apparently from the firing of the planes which had just a few minutes before so closely zoomed overhead.

Because Dr. Izumi thought the shooting was due either to an accident or to some fanatical attempt, he lightly passed off Dr. Johnson's attempt to persuade him to leave the airport, feeling that things would soon be taken care of and he would be able to fly on to Maui. As Dr. Johnson reluctantly drove off, Izumi realized that he and a few airport attendants were the only ones around. A tall, lanky Scandinavian stood with him as they looked and talked about the possible seriousness of conditions over Pearl Harbor way. By now this area was a billowing mass of black smoke and flames and occasionally a flaming plane was seen plunging downward into the area. By this time heavy gunfire and explosions were heard all over, and the seriousness of the entire affair dawned on Izumi and his Scandinavian acquaintance with a sudden outburst of gun-fire from the keawe-tree-covered areas surrounding John Rodgers airport. The whining sound of falling bombs which landed on the ocean side of the take-off field further convinced them of the urgency to get going. This thought was suddenly interrupted by the appearance of several huge droning planes flying very low, coming at them from the direction of the sea. Sensing real danger, they made a dash for safety —away from the administration building into the open—and frantically realized the only protection was that of a small tree planted in the center of the parking circle.

Unconsciously, throughout this entire excitement, Dr. Izumi had gingerly carried a box of fancy pastries intended for Maui consumption. Peculiarly, as he and his friend dashed for the tree, his first thought was to protect the delicate pastries —his second thought, one of misgiving, that he hadn't kissed his son Allan goodbye when he left Maui for Honolulu. As he dove for the protection of the tree—still carefully hugging his box of pastries—he found his lanky Scandinavian companion had beat him to it and was frantically trying to encircle his over six-foot frame around the tree trunk which Izumi flashingly realized was only about six inches in diameter. The next moment found Izumi and his pastries very much in competition with his lanky companion for the protection of the small tree. As the huge planes roared just overhead, they both buried their faces in the ground, peering up as they passed to see, first that their protecting tree was practically leafless, and second that the planes bore American insignia. The immediate relief was followed by pride and a feeling of security at the sight of the huge U. S. bombers. Later they found out that these bombers

In the last issue of the JOURNAL we presented you with Dr. Arthur G. Hodgins' account of his experiences on December 7, 1941. Dr. Hodgins was probably the first of the doctors to have any contact with the Japanese attack. In Dr. P. H. Liljestrand's absence from the Territory we are unable to determine whether he was the second or whether Dr. Homer Izumi and Dr. Harold Johnson were the second ones to have any experience under fire. We are, therefore, presenting their stories in this issue.—S. F. STEWART, M.D.

This series of reminiscences is being published as a matter of general human and historical interest. The material is presented verbatim despite our realization that it may contain occasional inadvertent inaccuracies. We invite, and will publish in this section, communications correcting these.—ED.

had flown in from the mainland and were unarmed, but the sight of them at that moment gave them courage to gather their wits and bags, secure a car, and leave the field.

After getting back to Dr. Johnson's home, Izumi and the Johnsons observed from the front porch the maneuvering of our ships trying to head out of the harbor for the open sea while many planes hovering over them tried to drop bombs on their decks.

Following this short period of watching, Dr. Johnson, who was in charge of the west Honolulu O.C.D. units, left to open up and activate his unit, while Izumi helped rig up a bombshelter in the yard. The following day and for the next 5 or 6 days Izumi worked in the Farrington O.C.D. unit and helped in the care of some patients who had been evacuated from Tripler to Farrington. About a week or ten days after the attack Izumi was given permission to fly back to Maui. Upon arrival at John Rodgers airport, one of the attendants, recognizing him as one of the December 7th refugees, told him that after he left the airport his plane had been machine-gunned by enemy planes.

"I have read the above report of my conversation and it is true to the best of my knowledge and belief."—HOMER IZUMI, M.D.

* * *

On August 7, 1947, I interviewed Dr. Harold Johnson, a dermatologist, who was living in upper Kalihi Valley on December 7, 1941. His classmate, Dr. Homer Izumi, had been in Honolulu to hear the lectures of Dr. John J. Moorhead and he was planning on taking the 8 o'clock morning plane to his home on Maui, carrying with him a number of pies and cakes for his wife. They arrived at the airport at about 7:30 A.M. when they became suddenly aware of a large flight of twenty or thirty planes coming in from the direction of the Molokai channel. About five minutes later they heard heavy explosions and saw flashes from the direction of Pearl Harbor, and huge columns of smoke began to rise from that area. They saw one of the planes suddenly catch fire in mid-air and plunge earthward. He remarked to his wife, "Just think, there goes a young lieutenant burning to death and think of the poor family that's left."

The airport officials had meanwhile gone on top of the building to see what was going on. A small private plane had taxied to the end of the runway for taking off when a Japanese plane suddenly swooped in and machine-gunned it, killing the pilot. The plane then turned and swept across the airport immediately above the airport station at such a low altitude that Dr. Johnson thought he could have thrown a baseball into the cabin. The "rising sun" on the wings was easily observed. There was difference of opinion as to whether this was a practice attack or whether it was the real thing. Suddenly one of the airport officials came in telling everyone to lie on the floor. Dr. Johnson had his wife and small child with him and told Dr. Izumi he felt he should take them home and he didn't believe the plane would leave for Maui. Dr. Izumi, however, felt sure the plane would take off and refused to leave the airport.

He therefore left Dr. Izumi at the airport and drove home, going along Dillingham Boulevard. He stated that the boulevard was absolutely clear. On arriving home they filled the bathtub with water, as well as some buckets, and then turned off all the public utilities in case of damage. About one-half hour later Dr. Izumi came back in a taxicab. He said that after they left the shrapnel began to fall all over, and he with his boxes of pies in both hands went out and tried to hide behind a small tree.

Dr. Johnson and Dr. Izumi thereupon proceeded to Dr. Johnson's regular station, which was supervisor of the first aid stations in the west portion of Honolulu. It was necessary for him to go from one first aid station to another, but his headquarters were in Palama where Joe Lam was the medical director. He saw the people who were brought in from a car in which a child had been killed and the others injured by exploding shrapnel. He covered the headlights of his car with blue cellophane and spent the night of December 7 making the rounds of his stations. Once during the day he drove home to see that the family were in good shape, and returned home for breakfast on the morning of December 8.

STEELE F. STEWART, M.D.

"I have read the above report of my conversation and it is true to the best of my knowledge and belief."—HAROLD JOHNSON, M.D.

* * *

To the Editor:

In connection with the article, "Reminiscences of December Seventh: I," I wish to make rather a strong statement.

According to the text of this article the late Dr. Hodgins saw fit to make the following remark under oath, "Col. King had done everything he could do to discourage their work [i.e., that of the Red Cross—Ed.] as being entirely unnecessary." This appears on page 50 of the JOURNAL, Volume 7, Number 1, and has reference, I believe, to the work done by the Medical Preparedness Committee in conjunction with the American Red Cross.

I wish to state clearly and without fear of contradiction that the above quotation is as far removed from the truth as it is possible for a thing to be.

I can remember distinctly the tall gaunt figure of Col.

King on the platform of the Mabel Smyth auditorium one Sunday morning in April, 1941. He was chewing what was alleged to be tobacco and he said this: "Gentlemen, it is highly probable that there will be war in the Pacific in the not too distant future. I can conceive of a carrier-based raid directed against the island of Oahu which might easily result in 2,400 major civilian casualties. Are you prepared to care for these casualties? I don't believe that you are."

He then urged us to throw our whole hearted support into the work of setting up medical aid stations. Dr. Robert B. Faus had already done considerable work in this direction, and Col. King urged that this work be continued. The question of equipment for these stations was a very difficult one. No funds were available from any source for such a purpose. Col. King knew this and he told us, that although the United States Army could not supply us with funds, it could supply us with equipment, and that he would see to it that the Army did supply it, and it did. Thus much of the equipment in our medical aid stations came from Col. King.

Moreover, Col. King arranged for men from the various army services to address us on different subjects at our Sunday morning meetings. Each man who came to speak to us was an expert in his own field. Men spoke on Chemical Warfare, War Gases, the Construction and Operation of Decontamination Units, Gas Masks, etc. This too came as a result of Col. King's interest.

Our Sunday morning meetings began in the latter part of March, 1941, and continued until the time of the attack. Col. King attended many of these meetings and was always most anxious to help us and was most generous with his counsel and advice.

Lastly, my own association with the preparedness program was sufficiently intimate for me to say beyond all peradventure of doubt that what Dr. Hodgins had to say concerning Col. King's attitude toward medical preparedness is not true.

WILLIAM WINTER, M.D.

34, Young Hotel Bldg.
October 24, 1947

* * *

To the Editor:

I was called to active duty on October 1940 as medical advisor for the Selective Service System for Hawaii. In May 1941, in addition to my other duties I was made Liaison Officer between the Office of Civilian Defense and the United States Army.

Following December 7, 1941, it was decided by the Office of Civilian Defense, then headed by Edouard R. L. Doty (later Colonel Doty A.U.S.) and the United States Army, represented by Colonel Edgar King (later General King) to establish two General Hospitals on Oahu, one in Honolulu and one near Schofield Barracks. The selection of the sites and suitable buildings was assigned to me. The Sacred Hearts Convent on Nuuanu Street was selected for Honolulu and the public school buildings in Wahiawa for the opposite side of the island which was practically without hospital service for the general population.

These sites were approved by Governor Poindexter, Colonel King and Mr. Doty. At no time did the question of the use of the Wahiawa Hospital for tubercular patients arise. That came much later after threat of invasion or active hostilities on Oahu had vanished.

CLARENCE E. FRONK, M.D.
Colonel, Medical Corps
U.S.A. Res.

Fronk-Wynn Clinic
October 27, 1947

To the Editor:

The article in the September-October number of the HAWAII MEDICAL JOURNAL, enttiled "Reminiscences of December 7th," by the late Dr. Hodgins, should, I think, in justice to some of the persons mentioned, be commented upon by the writer who was in a measure responsible for some of the actions which were criticized by Dr. Hodgins.

First of all, Major Spitler's remark that "they caught us with our pants down" was true equally of the Navy and of the combat forces of the Army. Shortages of equipment and supplies that were present at Tripler are certainly subject to criticism. In the warehouses across the road at Fort Shafter there was plenty of this material; it was not where it should have been, however, at the time it should have been there.

There was no reason why the surgeons in the operating rooms *should* have "seen Colonel King all day"; his duty lay elsewhere. I am sure that Mr. Alfred Castle will bear me out that Colonel King had *never* discouraged the Red Cross from preparing for war. To my personal knowledge, the Red Cross not only was encouraged by Colonel King but was of the greatest value to the Preparedness Committee of the Honolulu County Medical Society, with Colonel King's knowledge and approval.

As for all of the surgery being done by civilian surgeons: this was done in accordance with a definite plan of organization, arranged several months before.

Hindthought is a great deal easier than forethought. Anyone could have discovered America in 1494. We should separate the thinking and planning that went on in this community before and after Midway. Before Midway, it was highly probable—and, indeed, it turned out to be true—that the Japanese would again attack Hawaii. During that period of danger it was, in my judgment—and I would do the same thing again—advisable that hospitals should not at any time be completely full. There were long periods of time when, if even a serious bus accident had occurred, the victims could not have been hosptialized in Honolulu. Far from insisting that a temporary structure should not be built adjacent to The Queen's Hospital, Colonel King approved heartily and assisted (in planning) the construction of the present Kalanimoku Wing immediately behind The Queen's Hospital. The Wahiawa Hospital was not built for tuberculosis but to care for the population of the entire Island from Koolaupoko around to Waianae, including Pearl City and the Maluhia area. Again, before Midway, the plan was that in the event of an attack by the Japanese all of that population would be evacuated to the Wahiawa plain and a hospital of that size would have been necessary. After Midway, when it became improbable that we would be attacked, the vacant beds in that hospital were turned over for the use of the tuberculous but they were cared for by the staff of the Leahi Home, as far as medical attention was concerned.

I write this not in any way to disparage the memory of my dear friend, Dr. Hodgins, but merely to set the record straight on some matters concerning which I had intimate personal knowledge.

H. L. ARNOLD, SR., M.D.

The Clinic
Oct. 27, 1947

THE HONOLULU COUNTY MEDICAL LIBRARY

MRS. ETHEL HILL, *Librarian*

MISS JANE EISENHAUER, *Library Assistant*

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REGULATIONS

Loan privileges extended to all regular and honorary members of the Hawaii Territorial Medical Association, the Nurses' Association of the Territory of Hawaii, internes, residents, and doctors in the Territory who through no fault of their own are unable to become members of the Territorial Association.

Medical officers of the armed forces and Public Health Services stationed in Hawaii may be elected to membership upon payment of $5.00 per annum, with full library privileges.

Use of books and journals *in the library* is extended to the above and also to all military medical personnel, University students and authorized research workers.

Any professional person desiring restricted or temporary *loan* privileges may apply for guest membership by filling out an application form. This form must be signed by a sponsor who is the head of the applicant's organization, or in event of absence, the acting head. A nominal charge of $1.00 a year is made in order to help defray library costs and depreciation on books and journals, and a "Guest Membership" card is issued.

Physicians wishing to refer patients to the Medical Library may do so by giving the patient a note stating the particular reference to be used *in the library;* or loan privileges may be granted *on the doctor's name.*

RECENT ACQUISITIONS

Biochemistry & Bacteriology

Burdon, K. L. *Textbook of microbiology.* 3rd ed. rev. c1947. (Gift of publisher.)

Duncan, G. G., ed. *Diseases of metabolism.* 2nd ed. c1947. (Gift of publisher.)

Luck, J. M., ed. *Annual review of biochemistry.* v. 16. 1947.

Cardiology

Nedzel, A. J. *Vascular spasm; experimental studies.* c1943. (From University of Illinois.)

Riseman, J. E. F. *P-Q-R-S-T; a guide to electrocardiogram interpretation.* 2nd ed. c1947. (Gift of publisher.)

Hematology, Lymphatics, etc.

Birch, C. L. *Hemophilia.* 1937. (From University of Illinois.)

Maher, F. T. *The reticulo-endothelial system in sulfonamide activity.* c1944. (From University of Illinois.)

Potter, E. L. *Rh; its relation to congenital hemolytic disease and to intragroup transfusion reactions.* c1947. (Gift of publisher.)

Zimmermann, A. A. *Origin and development of the lymphatic system in the opossum.* 1940. (From University of Illinois.)

Hospitals

Commission on Hospital Care. *Hospital care in the United States.* c1947. (From Hospital Association.)

Rosenfield, Isadore. *Hospitals; integrated design.* c1947. (From Hospital Association.)

Mental Hygiene

Biester, L. L. *Units in personal health and human relations.* c1947. (Gift of publisher.)

Burnham, W. H. *The wholesome personality.* c1932. (From Bureau of Mental Hygiene.)

Clark, E. K. *Mental hygiene for community nursing.* c1942. (From Bureau of Mental Hygiene.)

Davis, J. E. *Principles and practice of recreational therapy for the mentally ill.* c1936. (From Bureau of Mental Hygiene.)

Doherty, W. B., ed. *Rehabilitation of the war injured.* c1943. (From Bureau of Mental Hygiene.)

Grinker, R. R. *Men under stress.* c1945. (From Bureau of Mental Hygiene.)

Robinson, G. C. *The patient as a person.* c1939. (From Bureau of Mental Hygiene.)

Stern, E. M. *Mental illness: a guide for the family.* c1942. (From Bureau of Mental Hygiene.)

Stevenson, G. S. *Child guidance clinics.* c1934. (From Bureau of Mental Hygiene.)

Neurology & Psychiatry

Association for Research in Nervous and Mental Disease. *Military neuropsychiatry.* c1946.

Bonin, Gerhardt von. *The cortex of Galago.* c1945. (From Universtiy of Illinois.)

Brock, Samuel. *The basis of clinical neurology.* 2nd ed. c1945. (From Bureau of Mental Hygiene.)

Brock, Samuel, ed. *Injuries of the skull, brain and spinal cord.* 2nd ed. c1943. (From Bureau of Mental Hygiene.)

Dayton, N. A. *New facts on mental disorders.* c1940. (From Bureau of Mental Hygiene.)

Freud, Sigmund. *The interpretation of dreams.* 3rd ed. 1913. (From Bureau of Mental Hygiene.)

Fulton, J. F. *Physiology of the nervous system.* 2nd ed. rev. c1943. (From Bureau of Mental Hygiene.)

Hart, Bernard. *The psychology of insanity.* 4th ed. c1931. (From Bureau of Mental Hygiene.)

Lewis, N. D. C. *Outlines for psychiatric examinations.* 3rd ed. c1943. (From Bureau of Mental Hygiene.)

Monrad-Krohn, G. H. *The clinical examination of the nervous system.* 7th ed. 1938. (From Bureau of Mental Hygiene.)

Noyes, A. P. *Modern clinical psychiatry.* 2nd ed. c1939. (From Bureau of Mental Hygiene.)
Ranson, S. R. *The anatomy of the nervous system.* 7th ed. rev. c1943. (From Bureau of Mental Hygiene.)
Riley, H. A. *An atlas of the basal ganglia, brain stem and spinal cord.* c1943. (From Bureau of Mental Hygiene.)
Strecker, E. A. *Fundamentals of psychiatry.* 4th ed. c1947. (From Nurses' Association.)
Strong, O. S. *Human neuroanatomy.* c1943. (From Bureau of Mental Hygiene.)
Tilney, Frederick. *The form and functions of the central nervous system.* 3rd ed. c1938. (From Bureau of Mental Hygiene.)

Nursing

Bailey, Harriet. *Nursing mental diseases.* 4th ed. c1939. (From Bureau of Mental Hygiene.)
Bennett, A. E. *Psychiatric nursing technic.* c1940. (From Bureau of Mental Hygiene.)
Bigley, L. I. *Community clinics.* c1947. (From Nurses' Association.)
Davis, D. M. *Urological nursing.* 4th ed. c1946. (From Nurses' Association.)
Davis, M. E. *DeLee's obstetrics for nurses.* 14th ed. (From Nurses' Association.)
Eliason, E. L. *Surgical nursing.* 8th ed. c1947. (From Nurses' Association.)
Gilbert, Ruth. *The public health nurse and her patient.* c1940. (From Bureau of Mental Hygiene.)
Hetherington, H. W. *Nursing in prevention and control of tuberculosis.* Rev. ed. c1945. (From Tuberculosis Association.)
Ingram, M. E. *Principles of psychiatric nursing.* c1939. (From Bureau of Mental Hygiene.)
Lesnik, M. J. *Legal aspects of nursing.* c1947. (From Nurses' Association.)
National Organization for Public Health Nursing. *The public health nursing curriculum guide.* 1942. (From Bureau of Mental Hygiene.)
Sands, I. J. *Nervous and mental diseases for nurses.* 4th ed. c1941. (From Bureau of Mental Hygiene.)
Stearns, H. O. *Elementary medical physics.* c1947. (From Nurses' Association.)
Steele, K. M. *Psychiatric nursing.* c1943. (From Bureau of Mental Hygiene.)
Wolf, L. K. *Nursing.* c1947. (Gift of publisher.)

Pediatrics

Caffey, John. *Pediatric x-ray diagnosis.* c1945.
Low, A. A. *Studies in infant speech and thought.* Pt. 1. 1936. (From University of Illinois.)

Pharmacology & Therapeutics

A.M.A. Council on Pharmacy and Chemistry. *Useful drugs.* 13th ed. c1942.
A.M.A. Council on Pharmacy and Chemistry. *Annual reprint of the reports of the council for 1946.* (Gift of publisher.)
McIntyre, A. R. *Curare; its history, nature and clinical use.* c1947. (Gift of publisher.)

Thyroid

American Association for the Study of Goiter. *Transactions: 1942-46.* 1946.
Kampmeier, O. F. *Origin and development of mediastinal and aortic thyroids and the periaortic fat bodies.* 1938. (From University of Illinois.)

Tuberculosis

Hatfield, W. H. *Handbook on tuberculosis.* 1944. (From Tuberculosis Association.)
Heffron, Roderick. *Pneumonia.* c1939. (From Tuberculosis Association.)
Judd, A. R. *Diseases of the chest.* c1947. (From Tuberculosis Association.)
Lisa, J. R. *Bronchiectasis.* c1943. (From Tuberculosis Association.)
Lord, F. T. *Chemotherapy and serum therapy of pneumonia.* c1940. (From Tuberculosis Association.)
Miller, W. S. *The lung.* 2nd ed. c1947. (From Tuberculosis Association.)
Rigler, L. G. *The chest; a handbook of roentgen diagnosis.* c1946. (From Tuberculosis Association.)
Rosenthal, S. R. *The general tissue and humoral response to an avirulent tubercle bacillus.* 1938. (From University of Illinois.)
Segal, Jacob. *Diseases of the respiratory tract.* c1941. (From Tuberculosis Association.)
Snow, William. *Principles in roentgen study of the chest.* c1946. (From Tuberculosis Association.)
Underwood, E. A. *A manual of tuberculosis.* 3rd ed. 1945. (From Tuberculosis Association.)
White, Benjamin. *The biology of pneumococcus.* c1938. (From Tuberculosis Association.)

Miscellaneous

Boyd, William. *Surgical pathology.* 6th ed. c1947. (Gift of publisher.)
Christian, H. A. *The principles and practice of medicine.* 16th ed. c1947. (Gift of publisher.)
Fishbein, Morris. *A history of the American Medical Association,* 1847-1947. c1947. (Gift of publisher.)
French, Herbert, ed. *An index of differential diagnosis of main symptoms.* 6th ed. 1945.
Kampmeier, R. H. *Essentials of syphilology.* c1944.
Porteus, S. D. *And blow not the trumpet.* c1947. (Gift of publisher.)
Puestow, C. B. *Intestinal motility of the dog and man.* 1940. (From University of Illinois.)
Quiring, D. P. *The head, neck, and trunk.* c1947.
Thorek, Max. *Plastic surgery of the breast and abdominal wall.* c1942. (Gift of Dr. R. G. Hunter.)

EXCERPTA MEDICA

The response of individual doctors and groups has been most encouraging in respect to the *Excerpta Medica.* The total yearly subscription cost of these excerpts to the Library would amount to $355 for all sections, which the Library could not afford. However, it was decided that an attempt should be made to secure this world abstract within the Territory. Accordingly, we have asked the University of Hawaii to consider subscriptions to sections on Anatomy, Physiology, etc., Leahi will in all probability get the Tuberculosis section, the Medical Group will take the Endocrinology and Obstetrics and Gynecology sections, and Dr. Arnold, Jr. at the Clinic will be receiving Dermatology. Dr. Herter will get the Pediatrics section, and Dr. Mon Fah Chung will subscribe to Neurology and Psychiatry for the Medical Library. It is

hoped that the Honolulu Surgical Society will cover the Surgery section. We trust that the Medical Library will be the final recipient of the *Excerpta,* and we wish to extend our thanks to the doctors who have been interested and kind enough to support us in acquiring this outstanding item.

BOOKBINDING

Mr. Henry Takara, who was employed as part-time bookbinder in 1943-44 for the Library, has now opened a shop of his own at 1524 Emma St. (Honolulu Community Church). Henry will be glad to receive orders from any doctor who wishes to bind his journals, or have mending or repair work done. His telephone number is 3527. Here's wishing you lots of luck, Henry!

MEMBERSHIP

We would like to call your attention to the revised rules and regulations at the head of this column, as there has been added a *Guest Membership* (at $1.00 a year) to permit any professional person, who has the proper qualifications, to borrow from the Medical Library. With the addition to the Library of the collection from the Bureau of Mental Hygiene, it was felt that these books particularly should be made available to social workers, teachers, etc., who might have a definite use for such material. There have often been requests for books and journals from physiotherapists, anesthetists, laboratory technicians, and others who are indirectly allied with the medical and nursing professions. It is hoped that this guest membership will open the resources of the Medical Library to all individuals or groups who can profit from such use. The Library Committee also decided that it should be possible for a doctor to refer a patient to the Medical Library if he so wishes, and if he specifies just what book, pamphlet or other material he wants the patient given. If it is a case of borrowing such material, the doctor must be willing to assume the responsibility and the books will be charged directly to him.

NEWSPAPER CLIPPING FILE

It is not generally known that the Library keeps a complete newspaper clipping file of all articles relating directly or indirectly to the medical and nursing professions. All items on hospitals, public health, etc. are kept in a general file, while material pertaining to special branches of medicine (i.e., cancer, polio, etc.) is separated by subject. Of special interest to individual doctors or nurses is the biographical material which is arranged chronologically under the name of the individual. If you wish to check back at any time to see what has been published about you, just call the Librarian.

BOOK REVIEWS

A History of the American Medical Association. By Morris Fishbein, M.D. 1226 pp. Price $10. W. B. Saunders Company, Philadelphia & London, 1947.

This book is a fascinating and instructive story of the first hundred years of the American Medical Association. It should be required reading for anyone making a career of the administration of medical organizations. It is interesting reading for any doctor.

The first 494 pages contain virtually all of the story of the American Medical Association from its founding to the succession of its 100th president, Dr. Edward Bortz, in March, 1947. The following 5 pages detail the stories of several of the outstanding libel suits to which the American Medical Association has been subjected, chiefly as a result of Dr. Fishbein's crusading editorials against various quacks. There is also in this section a 16-page detailed review of the famous Federal suit against the American Medical Association *et al* for violating the Sherman Antitrust Act.

The next section of the book consists of biographic sketches of the nine eminent American physicians who have become recipients of the Distinguished Service Medal of the American Medical Association.

Pages 569 to 830 consist of brief biographies of all of the 100 presidents of the American Medical Association, written by Dr. Walter Bierring. Their photographs and signatures are included, as well as a designation of the session of the Association at which they presided.

The remainder of the book, from page 833 to 1185, consists of descriptions, by the various persons heading them, of the individual administrative and other component parts of the American Medical Association, including the Board of Trustees, the Office of the Treasurer, the Councils, the Business Department, the various bureaus, the sections, and all of the publications, including not only various Archives' but the Index Medicus and the Directory.

The whole book tells a story of which doctors may well be proud, of an organization which has in general functioned in a sincere and unselfish, if occasionally reactionary manner, to further the primary causes of advancement of standards of medical education and medical care throughout the United States over an entire century of continuous active existence. If the Association has been a "closed corporation" controlled by a small clique, as is occasionally claimed, the fact is extraordinarily well concealed. It seems very clear that whatever the shortcomings of the Association may have been, they have been those inevitably to be expected from human nature itself, and in general they have been those arising out of the difficulty of unifying the desires and motives of the hundreds of county medical societies of which the entire organization is fundamentally composed.

The book is a long one to read but a pleasant one to browse in.

HARRY L. ARNOLD, JR., M.D.

The Role of Hormones in Sterility. The Schering Award, 1946. 38 pp. Schering Corporation, Medical Service Department: Bloomfield, New Jersey, 1947.

In this monograph Mr. Boving, winner of the 1946 Schering Award, presents a timely account of the present status of endocrinology in its relation to the field of sterility.

The important hormones and hormone-like agents are discussed. Endocrinology as applied to the field of sterility is considered with special emphasis on endocrine control of cervical secretion and possibility of improving spermigration by estrogens.

This monograph contains useful information and gives a brief but rather basic understanding of the role of hormones in sterility.

K. S. TOM, M.D.

Textbook of Microbiology. By Kenneth L. Burdon, Ph.B., Sc.M., Ph.D. 728 pp. Price $3.50. The Macmillan Company, New York, 1947.

Textbook of Microbiology has been written for medical students, and the arrangement and scope of the subject matter makes it an admirable text for this purpose. Part one covers the general properties of bacteria, history, classification, morphology, metabolism and methods of study. Part two deals with methods of destroying microorganisms and of controlling the spread of communicable diseases. Part three comprises five chapters on immunology, and part four takes up the specific microbiology of the important infectious diseases. Each chapter is complete in itself and includes laboratory techniques which were listed in a separate section in the two previous editions of the book. Each chapter includes a list of carefully selected references, and is closed by a set of questions covering the subjects discussed in it. An instructor can thus assign chapters in consecutive order and base his entire course, including laboratory work, upon the logical, sequential pattern of the book.

New discoveries in the fields of microbiology and immunology have been added. These include a discussion of the electron microscope, a short section on the Rh factor, a discussion of the chemotherapeutic drugs, and a table listing the antibiotic agents known to date, and the organisms against which they are effective. The section on leprosy reflects the completeness with which the medical literature has been reviewed in the preparation of the new edition. In this section mention is made of the uselessness of chaulmoogra oil and its derivatives in the treatment of leprosy, and the promise of the newer sulfone drugs.

The paper is of fair quality, and the illustrations are adequate, most of them being actual microphotographs. I have no hesitation in recommending this book most highly.

I. L. TILDEN, M.D.

Nursing. By Lulu K. Wolf, R.N., B.S., M.P.H. 534 pp. Price $3.50. D. Appleton-Century Inc., New York, 1947.

Miss Lulu Wolf has presented to the profession an excellent text and reference for all students and graduates interested in nursing and the advancement of nursing education.

As we trace the history of nursing, it may be seen that the content of the book combines old and new ideas. The philosophy of the book follows the trends of modern medicine and nursing and may be summed up as the prevention of disease and promotion of health for the individual and his community.

The author believes that it is very important that the student become well grounded in the understanding of health in its fullest meaning. To do this she must evaluate her own health practices and establish an optimum health pattern for herself. She must also understand the community and its facilities for promoting the best interests of the individual and the group.

Miss Wolf believes that to really establish this philosophy in the mind of the student, she must be given all possible opportunities and the best of guidance in the study of herself, other individuals, and the community. She feels that this interest in the obtaining and maintaining of health for people should be well established for the student before she begins her contact with the hospital patient. Too often a student immediately introduced to the hospital becomes short sighted in her important but temporary objective of helping to cure the sick and she forgets that she has a responsibility for her patients' future health.

The book is divided into three parts, the first two devoted to orientation and establishment of proper philosophy for nurses, the last part applying that philosophy to the different methods necessary in the practice of nursing in the home and hospital.

The book is appropriately and clearly illustrated with drawings to facilitate the meaning of the subject being discussed.

The reviewer considers Miss Wolf's book an outstanding contribution to the profession.

MARY HAYES, R.N., B.S.

Rh—Its Relation to Congenital Hemolytic Disease and to Intragroup Transfusion Reactions. Edith L. Potter, M.D., Ph.D. Price $5.50. 296 pp. The Year Book Publishers, Inc., Chicago, Illinois. 1947.

Dr. Potter's book on Rh, with a foreword by Dr. Louis K. Diamond, should be available to every physician who is interested in this subject. It is based partly on a wide personal experience with over 6,000 postmortem examinations of fetuses and infants including 170 cases of hemolytic disease of the newborn, and partly on a critical review of the numerous publications which have appeared during the past six years. The bibliography contains 794 references to papers on the Rh factor and related subjects. Every phase of the problem is discussed concisely, critically and well. The paper is of good quality and the book is profusely illustrated with excellent plates showing the clinical appearance, and gross and microscopic pathology of hemolytic disease of the newborn.

The term "hemolytic disease" is adopted as a substitute for some of the conditions encompassed rather loosely under the former term "erythroblastosis fetalis." It is defined by the author as a state in the infant caused by the presence of maternal antibodies specific for an antigen that is present in the red blood cells of the affected fetus or infant. The diagnosis, treatment, and prognosis, as well as the gross and microscopic pathology of this disease are discussed concisely and authoritatively.

The inheritance, racial incidence and varieties of Rh antigens and antibodies together with accepted methods of testing for them are considered in detail. The book is a condensation of all worthwhile existing knowledge about the Rh factor and hemolytic disease of the newborn and can be most highly recommended.

I. L. TILDEN, M.D.

Pharmacology, Therapeutics and Prescription Writing—For Students and Practitioners. By Walter Arthur Bastedo, Ph.G., Ph.M., M.D., Sc.D., F.A.C.P. 5th ed. 840 pp. with 82 illustrations. Philadelphia and London. W. B. Saunders Company, 1947. Price $8.50.

The fifth edition of Bastedo's Pharmacology, Therapeutics and Prescription Writing is a fit successor to the previous editions of this excellent work. While it is intended primarily, and is probably best suited, for the use of the practicing physician, it seems nevertheless well fitted to be used as a textbook of pharmacology because, while the emphasis is placed upon the clinical use of the drugs concerned, the mode of action and other laboratory data are given, in addition. The most remarkable thing about the book is the skill with which the author has succeeded in being up to the minute at the time of publication, a matter which is more difficult than anyone will realize who has never written a book.

If one adverse criticism may be offered it is that the writer tends to be, perhaps, somewhat too detached for the author of a textbook. In controversial matters, he is prone to mention those authors who adhere to one view of the matter and those who adhere to the opposite view, but in most instances he does not give his own views on the subject. This is, of course, as scientific writing should be; but for the use of students it would be somewhat confusing.

All in all, your reviewer has only praise for the book. It is well done, up to the minute and very well arranged.

H. L. ARNOLD, M.D.

Surgical Pathology. By William Boyd, M.D. 6th ed. 858 pp., 530 illustrations. Price $10. W. B. Saunders Company, Philadelphia, 1947.

This standard textbook on surgical pathology has been one of the few such works that has managed to keep pace with the rapid advances in medicine and surgery. The section on etiology of tumors presents an up-to-date, concise discussion on the various aspects of carcinogenesis. The subject of infections is treated from the aspect not only of morbid anatomy, but also of pathogenesis. In keeping with the recent advances in the surgical treatment of congenital heart disease, the author has added a new section dealing with the pathology and pathological physiology of the anomaly. Brief presentations of clinical manifestations generally accompany the description of the pathological anatomy of the various diseases. The more common conditions are adequately treated, whereas the rarer diseases are only briefly described. The illustrations, especially the photomicrographs, are numerous and clear.

With each revision of this excellent work, the author has repeatedly fulfilled his objectives. Both the surgeon

and the internist will find this volume a very useful source of information for the understanding of the disease processes in the active state. The author is noted for his smooth literary style. The didactic tone should especially appeal to the beginner in the field of medicine.

THOMAS F. FUJIWARA, M.D.

A.M.A. Council on Pharmacy and Chemistry Reports 1946. 135 pp. American Medical Association, Chicago, Illinois, 1947.

The Council on Pharmacy and Chemistry was instituted in 1905 as a standing committee appointed by the Board of Trustees of the American Medical Association.

This Council publishes a widely read section in the *Journal of the American Medical Association,* dealing principally with the factual appraisal of new drugs. The annual report of the Council on Pharmacy and Chemistry of 1946 contains principally reprints of reports and editorial comments previously published in the *Journal.* In addition it contains minor reports that are mentioned only as a matter of record.

This volume is published for the purpose of making available to interested individuals the Council's official report.

HENRY C. GOTSHALK, M.D.

Curare—Its History, Nature, and Clinical Use. By A. R. McIntyre, M.D., Ph.D. 240 pp. Price $5. The University of Chicago Press, Chicago, Illinois. 1947.

This is a well written monograph on one of the least used and most mysterious of all potent drugs. While the paralyzing effect of curare has been known to Caucasians since the days of Columbus, it was nearly three hundred years before they learned the composition of the poison and nearly another hundred before the chief constituents were botanically identified as belonging to the family of Strychnos and the potent elements were found to be alkaloids.

It is interesting to note that the Indians were perhaps the first pharmacists to make use of biological assays. To test the potency of their brew they pricked the tail or toes of a lizard with a poison pin and the time for lethal action was observed. The lizard was selected because it required about twice as long to die as a warm-blooded creature. The name curare is evidently a corruption of two Indian words—uira, bird; and cor, to kill.

While its most noteworthy action is due to its paralyzing effects on the muscles, it should be noted that the rapid death is due to an action on the central nervous system, probably the respiratory center, which may be averted by positive pressure artificial respiration. The author, Professor McIntyre of the University of Nebraska, has been unable to satisfy himself of the nature or site of the curare's muscular reaction and he believes that we must know more about the "modus operandi of muscle excitation" before a satisfactory explanation can be offered. However, he hazards the guess that it probably is an inhibition of the normal action of acetylcholine on the muscle.

He believes its use as an adjuvant in anesthesia and in shock therapy is well established and feels that its use in tetanus, even in heroic doses in the severe case, is justified. Otherwise, he thinks the actions are more hoped for than factual.

He believes that most of the studies on muscle action are fallacious for the means of muscle stimulation experimentally are extremely artificial and he quotes an old saying, "The only proper way to break an egg is from the inside," as indicating the nature of his unbelief.

STEELE F. STEWART, M.D.

And Blow Not the Trumpet. By Stanley D. Porteus. 304 pp. Price $3.50. Pacific Books, Palo Alto, 1947.

"If the people of the land take a man of their coasts, and set him for their watchman . . . but if the watchman see the sword come, *and blow not the trumpet,* and the people be not warned; if the sword come and take any person from among them . . . his blood will I require at the watchman's hand."

Whose blood? The person's who was taken from among them? Or the watchman's? Ezekiel seems a little ambiguous.

There is nothing ambiguous about Mr. Porteus, however. He writes his story of the Pearl Harbor debacle in straightforward English prose, calling all the spades —and there are plenty of them—spades. He has used his reference sources (seven pages of them are listed in the back of the book) freely and well, and the story has been put together in a readable and thoroughly enjoyable form. Physicians of Honolulu are given their full meed of praise for their preparedness, and a detailed description of the medical activities of the day is given, keynoted by Major General Norman Kirk's now famous phrase, "when they were ready for it and we weren't."

You ought to read it.

HARRY L. ARNOLD, JR., M.D.

A Textbook of Medicine. Edited by Russell L. Cecil, A.B., M.D., Sc.D., with assistance of Walsh McDermott, M.D., Harold G. Wolff, M.D. 7th ed. 1730 pp. with 244 illustrations. Price $10. W. B. Saunders Company, Philadephia. 1947.

This popular and much used textbook maintains its characteristic structure with many improvements and additions. In the preparation of this new volume 55 discussions have been completely revised and 16 new contributions have been added. This volume is well illustrated. Many of the pictures are in color.

The authors have given detailed coverage of most diseases seen in the practice of medicine. Each disease is properly grouped, and fully discussed. Newer diagnostic procedures and therapeutic advances have been thoroughly presented.

This revision was undertaken during the war years. Many of the contributors were in the armed forces stationed in foreign countries. In spite of all of these difficulties, this group of 161 American physicians, under the editorship of Dr. Russell Cecil have compiled the finest single volume textbook of medicine ever written.

HENRY C. GOTSHALK, M.D.

The Medical Clinics of North America. Mayo Clinic Number. 273 pp. Price $16 a year. W. B. Saunders Company, Philadelphia, Penn. 1947.

The July volume of this medical journal, as readable as ever, presents in a concise manner the results of some of the work done at the Mayo Clinic in the various fields of medicine.

The first section of the volume is a symposium on "Blood Transfusions and Rh Factor." The papers in this symposium, five in number, were written by members of the transfusion committee. In the first article, "On Operation of a Blood Transfusion Service," the

author explains the management, both administrative and medical, of the Clinic Bank. The subject of "Laboratory Aspect of Blood Grouping and Rh Factor" is covered by Dr. George G. Stilwell in a second article. He discusses the most basic facts of blood grouping, and implies that most errors of typing are due to the human factor. To circumvent this factor as much as possible, all typings and blood groupings are done by two different technicians, using donor sera as well as donor cells. A short but precise section on Rh testing and typing is presented, as well as methods of determination of Rh sensitization.

Dr. Hunt discusses the "Rh Factor in Relation to Transfusion of Blood; Its Importance in Obstetrics." He makes the very thought-provoking statement that the percentage of Rh-negative women who become sensitized by pregnancy is relatively low, 2 per cent to 5 per cent, but that apparently, the percentage becoming sensitized by transfusions may prove to be much higher. Dr. Hargraves' article on "Reactions and Their Treatment" stresses the fact that prevention is far easier than treatment. Little is added to what we already know of allergic reactions, except that a patient known to be prone to have allergic manifestations should be prepared, if time permits, by the use of benadryl or pyribenzamine.

"Transfusions of Blood: Indications and Contraindications" is discussed by Dr. Stickney. This first section is well worth reading for all physicians who wish to know in brief something about the work of Blood Banks in general, since the problems of the Mayo Clinic Bank are the problems of all Banks.

The other Clinics which comprise the remainder of the volume, also all presented by members of the Mayo Clinic Staff, offer a wide range of subjects. Of particular importance to all physicians, since we seem to be among the pioneers in the Atomic Age, are two articles, one by Dr. Frank Krusen on "Atomic Energy in Medical Practice," and another by Drs. Hall and Watkins on the use of "Radiophosphorus in the Treatment of Blood Dyscrasias." The importance of radioactive elements in research, diagnosis, and therapy is stressed. It must be remembered that we are at the threshold of a new era, and it behooves all of us to follow as closely as possible the rapid advances made in this field. Physicians, being scientists, should be in the vanguard leading the way to the constructive rather than destructive use of atomic energy.

An exhaustive review of the "Symptoms and Diagnosis of Duodenal Ulcer" is given by Drs. Rivers and Stauffer. As the title implies no discussion of treatment is appended, but every phase of diagnosis, from symptoms and signs as well as differential diagnosis, is discussed most completely. Another subject of importance to all physicians is presented by Dr. Magath in an article entitled "A Consideration of Certain Diseases of International Importance." The author feels that the danger of spread of exotic diseases is not to be feared too much; but that physicians treating former members of the armed forces or residents who have lived overseas should ever be aware of diseases which are not usually thought to be found on our shores. A few more clinics of general interest complete this volume. The reviewer has attempted to discuss those which seemed of most general interest. This does not mean that those not mentioned by title are of any less value.

LEON E. MERMOD, M.D.

The American Illustrated Medical Dictionary. By W. A. Newman Dorland, A.M., M.D., F.A.C.S., with the collaboration of E. C. L. Miller, M.D. 21st ed. 1660 pp. Price $8.50. W. B. Saunders Co., Philadelphia and London. 1947.

Drs. Dorland and Miller have maintained their usual high standard in this, the first new edition of Dr. Dorland's well-known dictionary to appear since 1944. There are 880 illustrations, including 233 portraits; 143 different subjects are presented in the form of a table, and 19 of the tables are illustrated. The paper is smooth and thin, the type is clear, the definitions are concise.

This edition is up-to-date enough to contain definitions of Tridione, Benadryl (though the dose is given as 15 mg. t.i.d., which is perhaps a misprint for 50 mg.), and Pyribenzamine (the abbreviation for which, PBZ, is misprinted as "PBI," and the official name of which, tripelennamine, is not given at all). Nitrogen mustards are defined, and their use in "neoplastic disease" mentioned. Stilbamidine is stated to be useful "in kala-azar and for relief of pain in multiple myeloma." Sopronol is defined, but desenex and undecylenic acid are not mentioned! Thiouracil is given, though propylthiouracil is not. Neither Charpy nor his epochal new treatment of lupus vulgaris seems to be mentioned.

Duodenum is no longer pronounced du*odd*anum, but digitalis is still, general custom to the contrary, digi*tay*lis.

It says in the Preface that many names of proprietary medicines have been dropped from this edition because they have become obsolete. This seems unfortunate, since the obsolescence of such names is apt to make it more than ever necessary for a reader to look them up in a dictionary. Apparently old editions should be saved for such a purpose. Obsolescence is not always cause for deletion, though: "dmegon" is defined as "Nicolle and Blaizot's vaccine: for use in all cases of gonorrhea." Likewise, the only word defined as meaning "in front of the ear" is "prootic"—the customary word for this, "preauricular," being laboriously defined as "situated in front of an auricle or an auricular structure." We should be grateful for the preservation of so delightful a word as "dodecadactylitis," but it seems quite remarkable that instead of being defined merely as "See duodenitis," it is soberly stated to mean, as it no doubt does, "Inflammation of the duodenum."

An occasional definition seems to have fallen a little behind changes in usage: no word seems to be given for the familiar act of expelling gas from the rectum. "Flatus" is defined as gas or air *in* the stomach or rectum; "flatulence" and "flatulent" both refer to *distension* of the gastrointestinal canal with "air or gas"—presumably gas oftener than air. The precise but unmentionable Anglo-Saxon term is not mentioned. Again, it is certainly customary to refer to the fold over the inner canthus of the eye as the "epicanthic fold"; the dictionary gives no such term, and calls the structure simply "epicanthus." Whether it is the duty of dictionary makers to follow usage in such matters as giving the word oxytocic an extra "x" instead of the first "c"—spelling it "oxytoxic," as four obstetricians out of five pronounce it—is perhaps debatable.

The section on leprosy is quite thoroughly deplorable, being out of date, incomplete, and inaccurate. "Lepra" is defined as "leprosy; also psoriasis"; actually, it has been obsolete in the latter connection for nearly a hundred years. "Leprosy" is defined in part as "accompanied

in its beginnings with fever, chills, etc.", a circumstance which is only occasionally, and probably exceptionally, true. The lesions are then stated to be either "patches of macular erythema"—which would be relatively rare: macular hypopigmentation is far more common, and erythema, when it occurs, is usually accompanied by the formation of either nodules or plaques—or blebs (a controversial point), or else "nodules and tubercles (*tubercular* 1)." This is really too bad. The term tubercular in this connection has been completely abandoned the world over for nearly fifty years; it was officially replaced by "cutaneous" in 1931 and by "lepromatous" in 1936. Loss of hair is ascribed to "macular" or "atrophic" leprosy (by which the type officially known as either "neural" or "tuberculoid" seems to be meant); actually, loss of hair occurs far more regularly in the lepromatous type. The terms "lepromatous," "maculoanesthetic," "neural," and "tuberculoid" are not even given! The lepromin test is correctly defined and credited to Mitsuda and Rost; neither of these men's names appears elsewhere except once under "Test," where it says "see *lepromin.*" "Leprolin" is said to be "said to be curative of leprosy," an observation which is of course as dead as the proverbial dodo. "Sulfone" is given merely its old chemical definition, though diasone is said to be an "antituberculosis compound" and both promizole and promin are said to be useful against tuberculosis and leprosy.

Acronyms are given for everything thinkable and some things unthinkable. D.N.P.M. means dinitrophenylmorphine. D.N.B. means dinitrobenzene and Diplomate of the National Board. L.D.S. means Licentiate in Dental Surgery: this will be news to Mormons. DMF (*not*, oddly, D.M.F.) means decayed, missing, and filled teeth. Electrocardiogram may be written as ecg, EK, EKG, or Ekg—take your pick. E.C.T. means electric convulsive treatment. ICSH (no periods) means interstitial cell stimulating hormone. I.C.T. means inflammation of connective tissue. And so on; it seems to have been carried to unnecessary lengths. What will be done with all the time this saves? Perhaps some of it can be used in finding out what other equally esoteric abbreviations mean when we stumble across them.

Out of one or two hundred thousand words, these few criticisms seem of little importance. It is the same good dictionary, with improvements, that we have all known since medical school days.

HARRY L. ARNOLD, JR., M.D.

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NOTES AND NEWS

PERSONALS

Dr. and Mrs. Edgar S. Childs, of Honolulu, are the proud parents of a son, their first, William Alexander Keola, who was born at The Queen's Hospital on August 29. They have one other child, a daughter.

Dr. Richard Y. Sakimoto, of Honolulu, was married on August 2 to Miss Edna Ishida, daughter of Mr. and Mrs. Tokio Ishida of Honolulu. Miss Ishida was formerly the secretary to the superintendent of the Kuakini Hospital.

A recent art showing at the Little Gallery in Honolulu featured the paitings of five Honolulu physicians: Dr. William Herter, Dr. Rudolph Benz, Dr. William Winter, Dr. Pauline Stitt and Dr. Nils P. Larsen.

Dr. Corydon McA. Wassell, of Little Rock, Arkansas, arrived with Mrs. Wassell on October 22 to assume his new position as physician in charge of the Shingle Memorial Hospital at Hoolehua, Molokai. He has offered his services without pay and his wife will give her services as a nurse also. Dr. Wassell was recently retired from the Navy as a Rear Admiral after receiving international recognition for his distinguished medical career, which included his heroism at the Battle of Java.

Dr. Koon Sun Fong, a native of Kauai, has become associated with the Chang Clinic, Honolulu, where he is specializing in obstetrics and gynecology. Dr. Fong is a graduate of St. Louis University Medical School, 1931, and has taken graduate training at the University of Pennsylvania and in Vienna. He recently served as director of obstetrics and gynecology in the UNRRA Hospital in South China.

Dr. Howard Liljestrand, of Aiea, and Dr. Nils P. Larsen, of Honolulu, have returned from a mainland trip which included a visit to Alaska.

Attending the annual meeting of the American Academy of Ophthalmology in Chicago were Drs. Philip Corboy, Harold Moffat and Clarence W. Trexler.

Dr. L. L. Sexton, of Hilo, Hawaii, has been elected to receive the 33rd and final degree of the Scottish Rite of Freemasonry.

Dr. Lester T. Kashiwa, recently discharged as a Captain from the Army Medical Corps, is associated with Dr. D. K. Izumi, in Wailuku, Maui. Dr. Kashiwa is a graduate of the University of Michigan School of Medicine and interned at The Queen's Hospital, Honolulu. He was formerly plantation physician at Pahala, Hawaii.

Dr. Shoyei Yamauchi, of Honolulu, has resumed his practice of general surgery after spending several months in Baltimore in graduate study. He also attended meetings of the International Cancer Research Congress in St. Louis and the American College of Surgeons in New York.

Recent changes in the resident staff at The Queen's Hospital are as follows: Assistant resident in surgery—Dr. James A. Mitchell, a graduate of Northwestern University Medical School in 1943, who interned at The Queen's Hospital before serving in the Navy; new internes include Dr. Clifford T. Druecker, of Milwaukee, Wis., a graduate of Marquette University Medical School in 1947; Dr. Herbert G. Pang, of Honolulu, a graduate of Northwestern University Medical School, in 1947, who is a cousin of Drs. L. Q. and H. Q. Pang, of Honolulu; Dr. Dana F. Richards, of Riverside, California, a graduate of the University of Illinois Medical School, in 1947; Dr. Earl M. Head, D.D.S., of Louisville, Kentucky, who is the first dental interne at The Queen's Hospital, where his duties will be primarily in the Out-Patient Clinic in the newly established Dental Department.

Dr. W. T. Minatoya, of Honolulu, has resumed his practice of ophthalmology after three months of graduate study at various eye clinics in St. Louis, Philadelphia and other centers.

Dr. Barrister A. Richardson, of Kealakekua, Hawaii, has left for a three years' training course in orthopedic surgery at the University of Pennsylvania Graduate School of Medicine. Dr. Richardson is a graduate of Yale University School of Medicine in 1943. He has served in the Army as post surgeon at Ft. Armstrong and Ft. DeRussey, and has been discharged as a Major.

Dr. Casey Domzalski, resident in internal medicine at The Queen's Hospital, has left the Islands for his home in Detroit, Michigan, where he will join his father in the practice of medicine.

Mr. Neal Ifversen, manager of the Hawaii Medical Service Association, has returned from

attending several medical care plan conventions on the Mainland. He presented a paper on the "Pineapple Plan" of HMSA, which plan was very favorably received by the delegates.

Drs. Ralph B. Cloward, Ogden D. Pinkerton and Robert T. Wong were accepted into fellowship at the Thirty-third Convocation of the American College of Surgeons held in New York on September 12.

Dr. Martin H. Lichter was accepted by the American Academy of General Practice on November 11.

Dr. and Mrs. Jay M. Kuhns of Lihue, Kauai, recently returned from a short vacation on the mainland. Dr. Kuhns remained in California, while Mrs. Kuhns visited St. Louis and Chicago. During their return voyage on the Matsonia, Dr. Kuhns and Dr. Rudolph W. Benz of Honolulu assisted the ship's surgeon in performing an emergency appendectomy. Dr. Benz had been spending a couple of weeks in San Francisco, during which he took a course of portrait painting lessons at the California School of Fine Arts.

Major General Raymond Bliss, army surgeon general, was a recent visitor in Honolulu on his return from the Far East. One of the purposes of his visit here was to review the progress made in establishing residencies in the new Tripler Hospital, which is expecting to receive patients about March 1.

Dr. Eugene Kellersberger, general secretary of the American Mission to Lepers, recently passed through Honolulu on his way to the Philippines and the Far East. While in the Islands he stayed with his classmate, Dr. Joseph E. Strode, and had an opportunity to visit the Kalaupapa Settlement and the Kalihi Receiving Station.

POSTGRADUATE COURSE IN LARYNGOLOGY, INTUBATION, RESUSCITATION AND ANESTHESIA

Dr. Paluel J. Flagg, inventor of the Flagg laryngoscope and the Flagg tubes for intratracheal anesthesia, author of *The Art of Resuscitation* and *The Art of Anesthesia*, and Chairman of the Committee on Asphyxia of the American Medical Association, will be in Honolulu next January and will give a postgraduate demonstration and lecture in the above subjects.

The demonstration of laryngoscopy and intubation for intratracheal anesthesia and resuscitation will be held in an operating room at one or more local hospitals, and the enrollment in this group will be limited to 12. The exact date and hour will be announced later. The fee will be $50, payable to Dr. Flagg through the Honolulu County Medical Society.

The lecture, with movies and lantern slides, will be held in the Mabel Smyth auditorium on Wednesday afternoon, January 21, from 1 to 5 p.m. Attendance at the lecture will be limited to physicians, dentists, nurses, anesthetists, and persons particularly interested in asphyxia and resuscitation and the other topics to be discussed. There will be no charge for the lecture.

HONOLULU SURGICAL SOCIETY

This society held its regular bi-monthly meeting at the Mabel Smyth Auditorium October 17. The program consisted of a number of papers on diseases of the colon as a round table discussion under the chairmanship of Dr. Laurence Wiig. The next meeting of the Society will be held on the third Friday in January. Anyone who wishes to present a paper or wishes surgical movies on a particular subject is asked to leave such message at the office of Dr. Grover Batten, program chairman.

HONOLULU OBSTETRICAL AND GYNECOLOGICAL SOCIETY

This society held a meeting in the Mabel Smyth Lounge on October 20, at which time a program on cerebral birth injuries was presented by Drs. R. B. Cloward and T. Togasaki.

UROLOGY AWARD

The American Urological Association offers an annual award of $1,000.00 (first prize of $500.00, second prize, $300.00 and third prize, $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Statler, Boston, Massachusetts, May 17-20, 1948.

For full particulars write the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tennessee. Essays must be in his hands before March 1, 1948.

CLINIC SCHEDULE

DOCTORS: Please save this schedule for reference.

Queen's Outpatient Department

General Clinic—Monday through Friday 8-4: Saturday 8-12

Monday	9:30-10:30 a.m.	Orthopedic
	1-2 p.m.	Diabetic
Tuesday	9-10 a.m.	Dermatological
	11-12 a.m.	Psychiatric
	12-1 p.m.	Eye
	1-2 p.m.	Pediatric
	2-4 p.m.	Neurological and Neurosurgical
Wednesday,	8:30-10:00 a.m.	Heart
	1-3 p.m.	Maternal Health
	1-2 p.m.	Dietary
Thursday	1-2 p.m.	Gynecological
	1-2 p.m.	Child Spacing
		Surgery by Appointment
Friday	1-2 p.m.	Ear, Nose and Throat
	1-2 p.m.	Pediatric
Saturday		None
Sunday	9-11 a.m.	Tumor—Follow-up of House Cases

St. Francis Outpatient Department

General Clinic—Monday through Friday 8-4: Saturday 8-12

Monday	8-9 a.m.	Dermatological
	8-9 a.m.	Dental
Tuesday	12:30-2 p.m.	Ophthalmological
	12:30-2 p.m.	Ear, Nose and Throat
	1-2:30 p.m.	Thoracic
Wednesday	8-10 a.m.	Cardiological
	12:30-2 p.m.	Gynecological
	12:30-2 p.m.	Proctological
Thursday	10-12 a.m.	Orthopedic
	12:30-2 p.m.	Obstetrical
Friday	8-10 a.m.	Pediatric
	12-2 p.m.	Urological

Allergy, Blood Dyscrasia and Tumor Clinics by Appointment only.

THE HOSPITAL PROGRAM

The Hospital Survey and Construction Act, which became law in August 1946, has launched the most comprehensive program in the history of this country for the construction of hospitals and health facilities. To help communities realize the benefits of this legislation, the U. S. Public Health Service has just issued a series of five pamphlets.

"The Hospital Survey and Construction Act" is a summary of the law and regulations. "Why We Need More Hospitals" gives the story of hospital needs in this country. "The Hospital Act and Your Community" tells in simple terms what the program means to states and communities. "Hospital Quiz" is a series of questions and answers on hospital planning. "What is a Hospital System?" describes a coordinated hospital system, intended to extend the scope of hospital care. Sample copies of these pamphlets are available free on request to the U. S. Public Health Service, Washington 25, D. C.

* * *

AMERICAN ACADEMY OF ALLERGY

The American Academy of Allergy will hold its annual convention at Hotel Jefferson, St. Louis, Missouri, December 15-17 inclusive. All physicians interested in allergic problems are cordially invited to attend the sessions as guests of the Academy by registering without payment of fee. The program, the scientific, and technical exhibits have been arranged to cover a wide variety of conditions where allergic factors may be important. Papers will be presented dealing with the latest methods of diagnosis and treatment as well as the results of investigation and research. Round table conferences will be held on Monday afternoon, December 15, 1947. Advance copies of the program may be obtained by writing to the Chairman on Arrangements, Charles H. Eyermann, M.D., 634 North Grand Boulevard, St. Louis, Missouri.

* * *

MOTION PICTURE FILMS

To assure the listing of all outstanding medical and surgical motion picture films in the revised "Catalogue of Professional Motion Picture Films" now being compiled, *all* film authors are urgently requested to immediately write for film questionnaires to be filled out and returned. All members of the profession are invited to cooperate with this undertaking by forwarding this announcement to an author or by furnishing the film title and full name and address of any film author. Send information to: Academy-International of Medicine, 214 West Sixth Street, Topeka, Kansas.

FINAL EDITION OF "COURAGE AND DEVOTION BEYOND THE CALL OF DUTY"

The final edition of the book, "Courage and Devotion Beyond the Call of Duty," which is composed of official awards and citations received by U. S. medical officers during World War II, is now being prepared by Mead Johnson & Company, Evansville, Indiana.

Any physician, who has not already done so, should write to Mead Johnson & Co. advising them of the awards he has received and also send a typewritten or photostatic copy of his citations. The following additional information would be of assistance in compiling the material for this book: Present rank or rank at time of discharge. Branch of service. From what university and in what year M.D. degree was received. Date of entry into the service.

CALLING ATTENTION TO:

Items of possible interest to friends of Chauncey D. Leake

August, 1947

1. BOOKOLOGY: Wise would be all doctors and medical students to study carefully Part I (*Principia Diagnostica*), including "Logic and Diagnosis" and "The Organon of Diagnosis," of Logan Clendening's *Methods of Diagnosis* (ed. E. H. Hashinger, Mosby, St. Louis, '47, 883 pp., $10.00). Delightfully historical and stimulatingly informative is A. T. Rasmussen's *Some Trends in Neuro-Anatomy* (Brown, Dubuque, Ia., '47, 100 pp., $2.00). Important is A. Szent-Gyorgyi's *Chemistry of Muscular Contraction* (Academic Press, N. Y., '47, 157 pp., $4.50). Association of Vitamin Chemists offers *Methods of Vitamin Assay* (Interscience, N. Y., '47, 208 pp., $3.50). It will be interesting to observe how unbiased and skeptical H. Sigerist may be in his *Medicine and Health in the Soviet Union* (Am.-Sov. Med. Soc., N. Y., '47, 416 pp., $5.00). S. H. Bartley and E. Chute distinguish between subjective phenomena of fatigue and impairment phenomena of tissue change in their *Fatigue and Impairment in Man* (McGraw-Hill, N. Y., '47, 420 pp., $5.00). In spite of English objection Excerpta Medica is issuing 15 abstract journals covering world medical literature: annual subscription is $145: American agents are Williams & Wilkins, Baltimore: initial issues look well: entirely in English. E. T. D. Fletcher offers *Medical Disorders of the Locomotor System Including the Rheumatic Diseases* (Livingstone, Edinburgh, '47, 636 pp., 45s). J. H. Wredden gives a useful discussion of *The Microscope: Its Theory and Applications,* with an historical introduction by W. E. W. Baker (Churchill, London, '47, 410 pp., 21s). On the medico-social front appears *A Medical Survey of the Bituminous-Coal Industry: Report of the Coal Mines Administration* (Dept. Interior, Washington, '47, 268 pp. plus 67 pp. photos). G. S. Lewis (author of *The Screwtape Letters and The Problem of Pain*) offers an interesting anthology of notes of George MacDonald (1824-1904) (MacMillan, N. Y., '47, 128 pp., $1.50). E. L. Potter discusses *Rh: Its Relation to Congenital Hemolytic Disease and to Intragroup Transfusion Reactions* (Year Book Publishers, Chicago, '47, 344 pp., $6.00).

2. PHYSIOLOGY: E. R. Trethewie shows tendency of achlorhydrics to become allergic (*Med. J. Austral.* 1: 633, May 24, '47). H. Hartridge reviews advances in physiology of vision (*Brit. Med. J.* 1: 637, Apr. 27, '46; 1: 913, June 28, '47). W. D. M. Paton and A. Sand describe optimum intrapulmonary pressure in underwater respiration (*J. Physiol.* 106: 119, '47). F. Davies & Co. find ventricles, containing more nucleotide, have more potential energy than auricles (*Ibid* p. 154). W. Schweizer demonstrates 1-tyrosine poisoning (counteracted by thiouracil) in rats (*Ibid* p. 167). L. Calma and S. Wright report that K ions specifically stimulate certain afferent fibers in posterior nerve roots (*Ibid* p. 211). F. C. Bartlett ably discusses measurement of human skill (*Brit. Med. J.* 1: 823, 877, June 14, 21, '47).

3. PHARMACOLOGY: B. Shapiro explains phloridain glucosuria on basis of depression of dehydrogenase systems involved in phosphorylation (*Biochem. J.* 41: 151, '47). G. T. Stocking describes use of "Synhexyl," one of R. Adams tetrahydrocannabinols, as a euphoriant for depressive mental states (*Brit. Med. J.* 1: 918, June 28, '47). A brief history of the chemical story of penicillin is offered by the editorial board of the coming monograph on penicillin synthesis (*Science* 105: 653, June 27, '47). G. Ungar reports release of proteolytic enzyme in anaphylactic and peptone shock in vitro (*Lancet* 1: 708, May 24, '47). M. Wachstein shows d-serine to be nephrotoxic, with protection by other amino acids preventing its tubular reabsorption (*Arch. Path.* 43: 503, 515, '47).

4. OTHEROLOGY: H. Koch offers exhaustive study of allergy in chronic otitis (Suppl. LXII, *Acta Oto-Laryng.,* Lund, '47, 211 pp.). G. Holler and F. Scholl discuss the problem of the relation of nutrition to goiter (*Wien. Med. Wochnschr.* 59: 321, May 23, '47). O. Hechter and E. L. Scully continue studies on spreading factors, including hyaluronidase (*J. Exper. Med.* 86: 19, '47). L. Halberstaedter and J. Leibowitz find x-rays produce hemolysis and fixation of erythrocytes (*Biochem. J.* 41: 235, '47). S. E. Brolin and T. Thunberg observe high citric acid content of thyroid, decreasing in women after menopause (*Acta Physiol. Scand.* 13: 211, '47). E. G. Robertson considers some physical aspects of encephalography (*Brain* 70: 59, '47). J. Y. Neel surveys clinical detection of genetic carriers of inherited disease (*Medicine* 26: 115, '47). I. H. Perry makes an interesting case record of Vincent van Gogh's illness (*Bull. Hist. Med.* 21: 146, '47). I. Galdston salutes the New York Academy of Medicine on its centennial (*J. Hist. Med.* 2: 147, '47). N. Howard-Jones critically studies the origin of hypodermic medication (*Ibid* p. 201). Our J. B. Cross reports cytological study of Toxoplasma with reference to effect on host cell (*J. Infect. Dis.* 80: 278, '47).

September, 1947

1. BOOKSICAL: M. Fishbein's *History of the American Medical Association,* which J.A.M.A. ran serially in part, for centennial, appears with biographies of the President by W. L. Bierring (Saunders, Phila., 1226 pp., '47, $10). L. Stevenson writes vivid biography of *Sir Frederick Banting* (Heinemann, London, '47, 25s). W. Moodie offers suggestions on *The Doctor and the Difficult Adult* (Cassell, London, '47, 15s). J. D. Spillane discusses *Nutritional Disorders of the Nervous System* (Livingstone, Edinburgh, '47, 396 pp., 20s). M. Gold-

smith well covers *The Road to Penicillin* (Drummond, London, '47, 174 pp. 10s6d). C. S. Keefer and D. G. Anderson discuss *Penicillin in the Treatment of Infections* (Oxford Univ. Press, N. Y., '47, 249 pp., $2.50). K. B. Lehman and F. Flury's *Toxicology and Hygiene of Industrial Solvents* is translated by H. F. Smyth and E. King (Wms. & Wilkins, Balt., '47, 380 pp., $5). R. Elman offers *Parenteral Alimentation in Surgery with Proteins and Amino Acids* (Hoeber, N. Y., '47, 304 pp., $4.50). F. Wuhrmann and I. C. Wunderly discuss *Die Bluetiweisskorper des Menschen* (B. Schwabe, Basel, '47, 356 pp., Swfr 36). Certain to be interesting is E. M. Tilton's *Amiable Autocrat: A Biography of Dr. Oliver Wendell Holmes* (Schuman, N. Y., '47, 480 pp., $5). The same comment goes for D. Schullian and M. Schoen's *Music and Medicine* (Schuman, N. Y., '47, 512 pp., $6.50). Pertinent to the centennial of Yale's Sheffield Scientific School in J. F. Fulton and E. M. Thomson's *Benjamin Silliman: Pathfinder in American Science* (Schuman, N. Y., '47, 304 pp., $4). J. L. Wright is functionally enthusiastic in *My Father Who Is on Earth* (Putnam, N. Y., '46, 194 pp., $3). Have you noted *The Medical Bookman* ed. F. C. Diller and W. R. Bett, a monthly review with pleasant chit-chat (Harvey and Blythe, Hanover Sq., London, 10s yearly)?

2. BIOCHEMICAL: H. B. Vickery outlines rules for nomenclature of amino acids and relatives (*J. Biol. Chem.* 169: 237, '47). W. F. Lipp and A. R. Lenzner find methylene blue test useful for bilirubin in urine (*Gastroenterol.* 8: 154, '47). N. E. Borglin shows urinary excretion of choline (4 mgm daily) is 1 per cent of dietary intake (*Acta Pharmacol. Toxicol.* 3, Suppl. 1, 121 pp., '47). G. Schapira and J. C. Dreyfus note significant fraction of non-chromatic iron in muscle is not extracted by pyrophosphate and increases in muscular atrophy (*Compt. Rend. Soc. Biol.* 141: 155, 157, '47). H. Borsook and J. W. Dubnoff discuss transmethylation in reporting oxygen independent methylation of homocysteine to methionine with choline as donor (*J. Biol. Chem.* 169: 247, '47). H. O. Michel and I. H. Scheinberg find no help from cytochrome C in anoxia or cyanide poisoning (*Ibid,* p. 277), contrary to report of S. Proger & Co. (*J. Clin. Invest.* 24: 864, '45). H. J. Buehler & Co. show amino acid composition and high molecular weight of crystaline clostridium botulinum toxin, but find no clue for high toxicity (*J. Biol. Chem.* 169: 295, '47). W. H. Fishman and A. J. Anlyan report high B protein and biosynthesis (*Science* 106: 73, July 25, '47). K. Meyer reviews biological significance of hyaluronic acid and hyaluronidase (*Physiol. Rev.* 27: 335, '47). R. Chambers and B. W. Zweifach review intercellular cement and capillary permeability (*Ibid* p. 436). E. C. Jungck and C. G. Heller conclude that ovaries inactivate gonadotropins and that estrogens inhibit ovarian growth, and in large doses, the pituitary (*Proc. Soc. Exper. Biol. Med.* 65: 148, 152, '47). C. W. Hooker & Co. find that monkey liver does not inactivate estrogens (*Ibid* p. 192).

3. PHYSIOLOGICAL: E. Ponder, W. B. Castle, H. A. Charippa, W. Dameshek. A. S. Gordon, S. Granick and F. Robscheit Robbins collaborate on discussion of red cell formation and destruction (*Ann. N. Y. Acad. Sci.* 48: 577, 704, '47). H. Fischer and P. H. Rossier describe muscle injury from high voltage currents with resulting kidney damage and anuria (*Helv. Med. Acta* 14: 212, '47). W. T. L. Ohlsson reports on oxygen toxicity at atmospheric pressure in causing lung injury (*Acta Med. Scand.,* Suppl. 190, 93 pp., '47). H. R. Brown and R. Pearson find 7 per cent increase in cardiac output for each 10 per cent increase in oxygen consumption (*Proc. Soc. Exp. Biol. Med.* 65: 307, '47).

4. INTERESTICAL: T. K. With offers welcome review on pathogenesis and forms of jaundice (*Acta Med. Scand.* 128: 25, '47). B. H. Robbins and J. S. Lundy review curare and relatives (*Anesth.* 8: 252, 47). L. H. Snyder discusses principles of gene distribution in human populations (*Yale J. Biol. Med.* 19: 817, '47). S. Moeschlin finds urethane helpful in leukemia by selective depression of neoplastic tissue (*Helv. Med. Acta* 14: 279, '47). K. Meyer & Co. suggest lysozyme as a factor in peptic ulcer (*Proc. Soc. Exp. Biol. Med.* 65: 220, '47). G. F. Otto and T. H. Maren find phenyl arsenoxides active against filaria (*Science* 106: 105, Aug. 1, '47). Mrs. A. V. Hill recommends small group care of old people (*Lancet* 1: 800, June 7, '47). J. R. Loofbourow philosophizes on research administration (*Science* 106: 113, Aug. 8, '47). J. L. Davanau analyzes physicochemical aspects of life (*Am. Nat.* 81: 161, '47). Our A. Packchanian discusses Chagas's disease in Texas (*Texas St. J. Med.* 43: 179, '47).

October, 1947

1. HEART AND CIRCULATION: Another knockout from Nuffield Institute, Oxford, is *Studies of the Renal Circulation* by J. Trueta, A. E. Barclay, K. J. Franklin, P. M. Daniel, and M. M. L. Prichard (Blackwell, Oxford, '47, 207 pp., 25s, available fr. C. C. Thomas, Springfield, Ill.). This shows ease of shunting renal blood flow from cortex to medulla with hypertensive reaction. G. Reid finds segmental arterial spasm not due to humoral agent in shed blood (*Med. J. Austral.* 2:139, Aug. 2, '47). H. Barcroft demonstrates reflex vasodilatation from body heating (*J. Physiol.* 106:271 '47). F. C. Eve continues studies on artificial circulation from rocking, indicating use in drowning and anesthetic emergencies, confirming Corning's abortive unpublished California efforts (*Brit. Med. J.* 2:295, Aug. 23, '47). A. B. Mukerjee well discusses coronary arteriosclerosis (*Calcutta Med. J.* 44:1 '47). G. W. Manning and G. C. Caudwell find dihydroergotamine effective in inhibiting ventricular tachycardia and fibrillation resulting from sudden coronary occlusion (*Brit. Heart J.* 9:85 '47). J. T. Peters recommends high oral doses of salicylates detoxified with bicarbonate to prevent inflammatory carditis in rheumatic fever (*Acta Med. Scand.* 128:51 '47). Our A. Ruskin discusses therapy of essential hypertension (*Texas St. J. Med.* 43:325 '47).

2. ENZYMES: D. Nachmansohn & Co. in Neuberg Festschrift note *in vitro* reversibility of choline esterase inhibition by diisopropyl fluorophosphate (*Arch Biochem.* 14:197 '47). H. M. Kalckar discusses biological function of energy rich phosphate bonds in enzymatic syntheses (*Nature* 160:143, Aug. 2, '47). J. F. Danielle and R. Brown edit symposium on nucleic acid (*Symposia Soc. Exper. Biol.* #1, Cambridge Univ Press, '47, 35s). J. D. Stone shows that enzyme groupings on surfaces of viruses are involved in red cell agglutination reactions (*Austral. J. Exp. Biol. Med. Sci.* 25:137 '47). P. A. Owren discusses enzymes involved in thrombin formation (*Acta Med. Scand.,* Suppl. 194, '47, 327 pp.). C. H. Li, C. Kalman and H. M. Evans show anterior pituitary growth hormone increases alkaline phosphatase of plasma and that APGH and andrenocorticohormone are antagonistic (*J. Biol. Chem.* 169:625 '47). Y. G. Shiau and J. Franck report automatic control of photosynthesis in limiting chlorophyll action by corre-

lated narcotic production (*Arch. Biochem.* 14:253 '47). B. Minz offers *La Transmission Chimique de L'Influx Nerveux* (Flammarion, 22 Rue de Vaugirard, Paris, '47, 412 pp., 1000 Fr.). H. N. Green and H. B. Stoner find adenosine triphosphate constricts pulmonary vessels, inhibits respiratory center and increases clotting action of thrombin, acting as a toxic factor in muscle extract (*Brit. J. Exper. Path.* 28:189 '47).

3. CLINICAL PHYSIOLOGY: P. W. Nathan discusses pathogenesis of causalgia in peripheral nerve injury (*Brain* 70:145 '47). E. Roseman and C. D. Aring describe neurology of alcoholism (*California Med.* 67:51 '47). J. C. Coverton and M. H. Draper report study of myotonia and paramyotonia (*Med. J. Austral.* 2:161, Aug. 9, '47). E. Garsset and L. Goldstein find that hyperglycemia from snake venoms is associated with their toxic properties (*Trans. Roy. Soc. Trop. Med. Hyg.* 40:771 '47). N. S. S. Ladell says mode of production of sweat differs from that of urine (*J. Physiol.* 106:237 '47). E. Mellanby and T. Moran agree that flour bleached with nitrogen trichloride causes protein changes producing peculiar hysteria in animals which eat it. (*Brit. Med. J.* 2:288, Aug. 23, '47; *Lancet* 2:289, Aug. 23, '47). K. A. Steffensen uses IV urea to estimate total water content of humans, finding 65-82% average and 40-60% in obesity (*Acta Physiol. Scand.* 13:282 '47). W. Mayer-Gross and J. W. Walker find rise in blood sugar with return to consciousness in insulin shocked schizophrenics after injection of 1-glutamic acid (*Nature* 160:334, Sept. 6, '47).

4. ALSO: Note H. O. Schild's discussion of pA, proposed scale for measuring drug antagonism (*Brit. J. Pharmacol.* 2:189 '47). Also N. S. Radin's article on isotope methods in biochemistry (*Nucleonics* 1:24, Sept. '47). Also R. Platt's survey of history taking and therapeutics (*Lancet* 2:305, Aug. 30, '47). Also K. Lange & Co.'s review of frostbite (*New Eng. J. Med.* 237:383, Sept. 11, '47). Also P. G. Stavsly & Co.'s con-toxic antibiotic, polymyxin, from B polymyxa, specific for gram-negative bacteria (*Bull. Johns Hopkins Hosp.* 81:43 '47). And G. Ivanovics and S. Horwath's antibiotic, raphanin, from radish seeds (*Nature* 160-280, Aug. 30, '47). Also E. J. Field and R. J. Harrison's *Anatomical Terms: Their Origin and Derivation* (Heffer, Cambridge, '47, 170 pp., 7s6d). Also E. D. Adrian's *Physical Background of Perception* (Oxford Press, London, '47, 95 pp., 10s). And C. S. Sherrington's new metaphysical introduction for his classic *Integrative Action of the Nervous System* (Cambridge Press, London, '47, 433 pp., 25s). And also H. H. Dale fine plea for freedom for science (*Nature*, 160:280, Aug. 30, '47).

DOCTOR--

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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THE SCHOOL OF PRACTICAL NURSING

Mrs. Gardner Black*

New and important in the nursing field in Hawaii is the School of Practical Nursing opened in October under the auspices of the Department of Public Instruction. Efforts to accomplish this progressive step have been under way for some time, but only in the past year has the community been sufficiently aroused to the need and desirability of such a school to inspire constructive action. The Community Nursing Council, whose chairman is Mr. Carl Flath, joined with the Board for the Licensing of Nurses to make specific plans and to find the ways and means of getting the school under way.

The Department of Public Instruction, through its Occupational Information and Guidance Service, has shown keen interest in offering training in practical nursing to the young women of the Territory. They quickly grasped the idea that this was a vocation of real value to the community as well as to prospective enrollees in the school. Since announcing the establishment of the school, they have been gratified at the tremendous response from high school graduates of all the Islands who wish to apply for the course. It has also been rewarding to see how willingly the community has taken this project to its bosom as a program it wishes to support.

After a year of study of local needs and situations and of mainland experience with schools of practical nursing, a definite program and set of standards were evolved by the committees appointed to prepare this material. As a result, we believe that we have developed a program that is basically sound in principle.

The course that is being offered by the D.P.I. is ten months in length. Three classes will be admitted and graduated annually. The students will spend a 35-hour week divided between the classroom and the wards of selected hospitals.

The first nine weeks of the course will be devoted almost entirely to instruction and practice in the school. Thereafter, a major part of each week will be spent in clinical experience, with return to the school for not less than two hours of class weekly. Clinical practice will be arranged so that each student will spend a definite amount of time in each of the participating hospitals. This will give her a well-rounded program through which to gain proficiency in all of the areas of nursing for which she is being prepared. These will be in general, as follows: chronic, mildly ill, convalescent and maternity patients. She will also be given instruction and practice in the care of well children, preparation of food and special diets, preparation of infant formulas, care of the new-born, and management of the household.

Fortunately, two excellent persons were found to be available for the two positions of Director of the School and Clinical Supervisor. As Director, we have secured the services of Mrs. Marjorie Elliott who is a trained and experienced educator and who has spent several years in nursing education in Hawaii. As Clinical Supervisor, Mrs. Myrtle Schattenberg is qualified to do an outstanding job. As a third member of the staff, the D.P.I. has appointed a Home Economics Instructor from their own group of teachers.

The School is located in the Home Economics Building of the Washington Intermediate School. The facilities provided there are splendid and are such that future expansion will be possible to accommodate a growing school. The original quarters will consist of a large classroom and nursing arts laboratory, a home economics laboratory and a beautifully equipped home apartment. The lat-

* Chairman, Committee on Practical Nursing of the Community Nursing Council.

ter will be used in teaching nursing and management in the home.

For admission to the school, an applicant must be at least 18 years old and must have completed the eighth grade. Good physical and mental health are essential; aptitude for nursing will be determined, in so far as is possible, in advance of acceptance. Students will provide their own living quarters and uniforms and will receive no remuneration during the course. Assistance will be given students from the other Islands in finding rooms and part-time employment when necessary. There will be no charge for tuition. Laundry of uniforms and meals during time on duty will be provided by hospitals giving clinical experience to students.

At the completion of the course, each student will receive a certificate from the School. She will then be eligible to take the examination for a license from the Territory of Hawaii to practice as a practical nurse.

The initial expense of preparing classroom facilities will be quite heavy because a good deal of high-cost equipment must be purchased for the nursing arts laboratory. Funds for such items were not available to the D.P.I. from their budget. The Committee of the Community Nursing Council came to the rescue, however, and secured from the Chamber of Commerce the sum of $8,000.00 to subsidize the School for two years. It is hoped that the next territorial legislature will see the value of the School and will make adequate provision for it in their budget for education.

An Advisory Committee is being appointed to assist the Faculty and the D.P.I. on matters of policy. It is composed of representative educators from nursing and general education fields, members of the community at large, selected persons from the participating hospitals, a physician, and later a member of the School Alumnae.

Dates of admission for the first three classes are: October 20, 1947; January 5, 1948; and March 15, 1948.

* * *

FLORENCE NIGHTINGALE SCHOOL OF NURSING

Bordeaux, France

On August 22, 1947, a letter from Mrs. Thelma M. Akana, Representative of Hawaii on the Advisory Committee, American Nurses' Memorial Florence Nightingale School of Nursing, Bordeaux, France, was sent to every member of the Nurses' Association Territory of Hawaii appealing for a contribution of at least $1.00 per member. Letters were also sent to the Honolulu hospitals.

Although donations had been coming in from nurses all over the country, there was still a shortage of many thousands of dollars needed to rehabilitate the School of Nursing and the Nurses' Quarters.

Mrs. Akana reports a good response to this appeal for funds.

Donations from the members of the Nurses' Association Territory of Hawaii total $357.50.

In answer to the appeal to the hospitals, Kuakini Hospital sent in $107.00 collected from staff nurses, students and the medical staff as well.

* * *

AMERICAN NURSES' ASSOCIATION HOUSE OF DELEGATES MEETING

CHICAGO, ILLINOIS

September 13, 14, 1947

Mrs. Dorothy Moll*

The meeting of the House of Delegates of the American Nurses' Association was held in the Grand Ballroom at the Hotel Stevens in Chicago on September 13 and 14, 1947. Although there were approximately 1,500 in attendance, the actual registration of delegates by the time of the final session was 1,153, 51 units being represented, all 48 states, Hawaii, District of Columbia and Freedman's Alumni Association.

In due time there will be a complete report of this meeting published in the Journal of the American Nurses' Association. We shall try here to give as comprehensive, but brief, a summary as possible of the procedure, discussion of opinions, recommendations, conclusions and action of the House of Delegates.

Your delegates were Mrs. Mildred Pinner, Miss Toshiko Matsui, Mrs. Dorothy F. Moll and Virginia Jones.

First Session

The meeting was called to order at 4:00 p.m. on Saturday, September 13, 1947, by Miss Katherine J. Densford, R.N., President of the American Nurses' Association.

Invocation by Rev. O'Malley, President of De Paul University, Chicago, followed.

Miss Densford explained that this meeting of the House of Delegates had been called for the purpose of presenting for discussion and approval, or disapproval, the findings and recommendations of the ANA Committee and the Joint Committee on the Structure Study, the presentation of the re-

* Delegate from Hawaii.

sults of study by and opinions of the various State Associations, and for the taking of whatever action the House of Delegates wished to take on these findings and the recommendations of the Rich Associates in their report.

After reading of the tentative agenda and rules of parliamentary procedure, it was voted to accept the above as printed.

Miss Densford then gave the statement of the President in which she reiterated the purpose of this meeting and outlined the background, progress and present status of the Structure Study, and proposed that the representatives of the six national organizations work through a joint committee to formulate a plan for a subsequent joint reorganization.

The report of the ANA Committee on the Structure Study was presented by Mrs. Katherine Miller, Chairman, with the following resolution:

Resolved that this House of Delegates approve and adopt the recommendations; and further resolved that the Board of Directors be empowered to take any and all action necessary to carry these recommendations fully into effect.

The Report of the Joint Committee on the Structure of National Nursing Organizations was read by Miss Hortense Hilbert, Chairman.

The above reports with their recommendations were referred to the Resolutions Committee.

Second Session

The second session was called to order at 7:45 p.m. September 13, 1947.

The President and Board of Directors felt that it might be more expedient if the meeting were opened to discussion before the States' reports were given, and so recommended that the agenda be changed to allow discussion from 7:30 to 9:00 p.m. and States' reports from 9:00 to 10:00 p.m. The previous action was rescinded and discussion opened.

The concensus of opinion in all discussions was that there is an urgent need for united action, that much more can be accomplished in the way of reorganization and in achieving the respect and cooperation of the public if we present a united front; that we must carefully weigh all proposals and make no hasty decisions; that we are not yet ready to make any change in our organization but must devote more time to study and evaluation of what we now have and our needs for the future.

There were varied expressions of opinion on the question of admitting lay members, and considerable confusion as to the definition of lay membership. Many felt that the problem of the practical nurse was becoming acute and that something must be done, but that there was the danger of weakening our organization and losing the balance of power in admitting non-professionals. Others pointed out that in the National League of Nursing Education and the National Organization for Public Health Nursing a great deal has been accomplished by working with lay members, and that in the Association of Collegiate Schools of Nursing it was necessary that some policies be dictated by laymen as directors of the universities.

Miss Virginia Jones, one of the Hawaii delegates, stated that Hawaii, having the only completely mandatory licensure law for practical nurses and faced with helping these workers to develop their ethics, standards and group purposes through their own organization, hopes that a very close organizational relationship with this group as well as with lay members can be worked out, and soon.

At the request of many delegates the action to change the agenda was rescinded and States' reports called for in order to better prepare us for discussion. Reports from 39 states and Hawaii were heard that night, and the other 9 states, Freedman's Alumni Association and District of Columbia, on Sunday morning.

Following is a resume of opinions expressed in the reports of the State Associations:

One organization incorporating all six national organizations: 17
Wyoming, Washington, Virginia, California, South Dakota, Oregon, Oklahoma, Arkansas, Ohio, New York, New Mexico, New Jersey, Montana, Missouri, Kansas, Iowa, Indiana

New organization be formed: 1
Tennessee

Maintenance of District-State National Relationship: 18
Wisconsin, West Virginia, Alabama, Pennsylvania, Oregon, North Dakota, Virginia, Montana, Michigan, Massachusetts, Nebraska, Indiana, Idaho, Maine, Colorado, Arkansas, Georgia, Florida

One payment of dues stressed: 1
Virginia

Objection to raising of dues in reorganization: 1
Virginia

Lay membership approved: 6
West Virginia, Vermont, Tennessee, Montana (as a section in nursing organization), Missouri, Oregon

Lay membership not approved: 6
Wyoming, Wisconsin, South Carolina, New Jersey, Florida, Louisiana

Lay membership as auxiliary or associate: 6
Virginia, Nebraska, Massachusetts, North Dakota, Minnesota, Hawaii

Lay membership in advisory capacity only: 7
Pennsylvania, New Mexico, New Hampshire, Iowa, New York, Maine, Alabama

Clarification of status of lay members: 2
Connecticut, Oklahoma

Continuation of Joint Committee on Structure Study: 9
Washington, Oklahoma, Massachusetts, Connecticut, Maryland, Pennsylvania, Rhode Island, Minnesota, California

Plan 1 (Rich Report) approved: 3
Washington, Vermont, New Hampshire

Plan 2 (Rich Report) approved: 0

Plan 1 with modification: 3
District of Columbia, Connecticut, Alabama

Plan 2 with modification: 1
Hawaii

Neither plan approved: 11

Wisconsin	Mississippi	Delaware	Pennsylvania
Iowa	California	North Dakota	Indiana
Arizona	New Jersey	Illinois	

Need for further study: 24

Utah	Illinois	Kentucky	South Carolina
South Dakota	Arkansas	District of	Maine
Mississippi	Nevada	Columbia	Georgia
Hawaii	Kansas	Delaware	Freedman's
California	Indiana	North Dakota	Alumni
Nebraska	Connecticut	Louisiana	
Michigan	New Mexico	Texas	

Full activity of ANA membership on Joint Structure Study Committee: 18

West Virginia	North Dakota	Massachusetts	Tennessee
Montana	North Carolina	Maryland	Connecticut
Minnesota	Nebraska	D. of Columbia	Colorado
(particularly	Kansas	New York	Hawaii
financial)	Michigan	Iowa	Utah

No racial prejudice: 4

Tennessee	Hawaii	New York	California

National Academy of Nurses favored: 7

Montana	Florida	Arkansas	Connecticut
Iowa	Hawaii	Missouri	

National Academy not favored: 1
Georgia

One accrediting Board: 1
Oregon

Membership in International Council of Nurses: 1
Iowa

Request a more central location: 2
Tennessee Iowa

Recommend a per capita basis for continuation of Joint Study: 3
Massachusetts District of Columbia Connecticut

Texas was still confused and offered no comments in their report, but later in general discussion, concurred on the need for study and proposed limitation of membership to professional nurses with necessary lay advice.

A delegate from New Hampshire suggested admitting lay members after about one or one and a half years.

A Montana delegate recommended that a provision be made in our new structure for inactive professional nurses.

Another Montana representative proposed that we limit the number of years of service on the ANA Board of Directors.

A Massachusetts member said that should a National Academy of Nurses be set up, voting in the assembly should not be limited to fellows.

A Maine delegate proposed an extended field service to states to help them with their problems.

The delegate from Michigan told of the experiment being carried on there. Michigan has set up a Nursing Center to pool the activities of all branches under the administration of one State Board, maintaining the independent organizations in the relationship of local and district to see what can be done without upsetting the status quo prematurely. Committees have been formed and are just beginning to get into action. The President requested that the Michigan Association prepare a progress report to be presented at the Biennial in June 1948.

Third Session

The third session was called to order at 8:30 a.m. on Sunday, September 14, 1947. Following the invocation and the remaining States' reports, open discussion was begun.

Again there was much comment on the need for further study with careful consideration of all the principles, purposes and functions of the six national organizations to determine where there is overlapping, and how to accomplish our goal—a bigger and better American Nurses' Association—either by maintaining the present or a similar structure of District-State-National relationship and subcommittees for the various sections, or by discarding the present set-up to form an entirely new creation. Many wondered what concessions the other five organizations would be willing to make.

Miss Janet Geister complimented the State organizations in that their reports reveal the value of the structure study and its resultant stimulation of unified action. She said that we are not ready to decide on the kind of structure we want and that we need to further evaluate what we already have to determine where the national organizations meet the structure and purposes, where they conflict and where they overlap. She said we must take our own good time in planning what we need. "It takes fifty years to grow an oak and three months a squash, and we are not squashes."

The need for unified action was repeatedly impressed upon us. One comment was that if our unity is interrupted we will go hand in hand with socialized medicine.

Many felt that ANA could and should immediately assimilate the National Association of Colored Graduate Nurses; that we must have an organization for all nurses in all fields, regardless of race and creed.

It was the general opinion that further structure study should be continued by the Joint Committee, but that the restrictions placed upon the twelve ANA members at the biennial in September 1946 be removed, and those members be given full power of voice and vote, *and* that the work of the Committee be jointly financed by all six organizations.

There was much discussion as to the manner of financing, some recommending that it be on the basis of ten cents per capita of ANA membership and five dollars per school or agency membership. It was also proposed that the ANA Finance Committee make provision in its budget for continuance of study. It was further recommended that when any plan of reorganization is presented, a tentative estimate of the cost be submitted. The Missouri delegation was not in favor of reorganization if it meant raising dues.

Fourth Session

The fourth and final session was called to order at 1:00 p.m. on Sunday, September 14, 1947.

The report of the Committee on Resolutions was presented by Mrs. Ruth Kuehn, Vice President of the ANA and Chairman of the Committee. There were nearly 250 resolutions submitted to the Committee by various groups, state delegations, and individuals, many of them duplicating

and conflicting. It would be impossible as well as impractical to here state them all. They were grouped by the Committee into relative categories and so presented.

Miss Densford asked "Shall the ANA continue from this point as the central united front organization assuming leadership and correlating within itself the state and district?" "Shall it retain its heart and character?" Or "Shall a new unified structure be formed as a result of the six organizations all working with equal status, including the ANA working as a sister among sisters?" "Shall we go forward to developing a new structure responsible to decide methods of attaining unity?" "Shall the ANA eventually be revised to permit acting on the fundamental issue?" "Which of the six organizations shall be retained?" "Shall the ANA proceed independently?" Miss Densford then presented the resolution from the Board of Directors:

It is the sense of this House of Delegates that in any activity in regard to organization the American Nurses' Association take the leadership; the ANA be preserved in essential structure retaining the district, state and national associations in relationship. For the purpose of achieving unity the ANA must retain its status in an expanded form, and any new matter must be diligently pursued by its authorized representatives.

An attempt was made to adopt the recommendations of the ANA Committee on Structure Study as a unit instead of discussing and acting upon them individually. Some members felt that in acting upon these seperate recommendations we would again tie the hands of the study committee as we did at the biennial in September 1946.

There was much discussion, and many recommendations were made, as to the advisability of adopting resolutions or referring them to the Joint Structure Study Committee. This in turn reopened questions as to financing of the Structure Study Committee and further led to discussion of personnel and representation of the various organizations and sections on the Joint Committee. The Private Duty Section was in there pitching and demanding increased representation. The battle was captained by Miss Cox of Georgia and Miss Revell of Louisiana, the vehemence of both being at times little short of belligerence. As a result many motions were presented, amended, reamended, restated, lost and reconsidered. Parliamentary procedure became more involved and confusion reigned supreme (particularly in the mind of your reporter). The parliamentarian and the legal advisor were called upon to untangle the conflict, order was restored and the way cleared for definite action. The following recommendations and resolutions were adopted:

Recommendation 1 (as amended):

That neither Plan 1 or Plan 2 presented in the Rich Report be adopted *at this time.*

Recommendation 2 (as amended):

That the Board of Directors request a joint meeting of the Boards of Directors of the six national professional nursing organizations not later than November 15, 1947, to consider ways and means of implementing a program of united action, which meeting would consider the areas of activities and interest peculiar to each organization and the areas of activities and interests common to more than one of the organizations, *and that the matter of personnel on the Joint Committee be left to the Board of Directors to decide.* (See report of the ANA Committee on Structure Study, page 15, for the above.)

Recommendation 3: (see Report of the Joint Committee on the Structure of National Nursing Organizations—Recommendation 5)

It is recommended that a subcommittee of the Joint Committee on Structure be named to study and plan ways in which an effective organization for nursing service and education can be developed immediately and to bring its plan back to the Joint Committee.

RESOLVED: That ANA support a Joint Committee on Structure Study and that all members be given power of voice and vote. The question of finances be referred to the Board of Directors of the ANA.

RESOLVED: That action on the resolutions of the Board of Directors of the American Nurses' Association be postponed until the biennial in June 1948.

That all recommendations and resolutions not thus far acted upon be referred to the Joint Committee on Structure Study for their consideration.

That this House of Delegates reaffirm its support of the platform of its association as adopted at the Biennial in September 1946, and that a vigorous program of public information be conducted in order to gain for the nursing profession the highest possible degree of public support and cooperation.

NEWS ITEM

Mrs. J. P. Foster (nee Miss Gloria M. Williams) public health nurse, Territorial Board of Health, returns from the mainland. It was last December that she left for a three-month leave of absence which because of an accident was extended to nine months. Mrs. Foster had the misfortune to fracture her knee in an auto accident just as she was returning to the Pacific coast after a motor trip to New York via the southern route. Her accident necessitated a period of hospitalization and a long convalescence.

In January 1947 before leaving the Pacific coast for the East she spent three days visiting the Alameda County Health Center and attended their clinics. Two very interesting afternoons were spent in observing home visits in the Housing Section for colored people at San Lorenzo, a large community of small homes, developed by private enterprise.

This group of people she stated was comparable to our own Puerto Rican section in Palolo Valley. The home interiors were very neat with a large display of crocheted table covers, doilies and pillows—all very similar to the Puerto Rican homes. The lawns were well

kept but the surroundings lacked the abundance of gay flowers and green shrubs which are seen growing by every home in Hawaii. Some advantages over Palolo Valley that did impress her were the well lighted streets and well organized garbage collections. She learned that the well cared for vegetable gardens are a "must" to all home owners of the group, and it appeared as though they vied with one another as to the appearance and output of their individual crops.

The San Francisco Rehabilitation Center was another interesting place where some very fine work is being done. Referrals come from physicians only and each patient must present a prescription before any assistance or treatment is given to him.

NATIONAL LEAGUE OF NURSING EDUCATION CONVENTION

The Territorial League of Nursing Education was formally accepted at a ceremony of the National League of Nursing Education Convention in Seattle, on the night of September 8. The Visitors Bureau sent leis to Mrs. Mildred M. Pinner, delegate, for presentation to the President of the National Association, Miss Ruth Sleeper; to the President of the State Association, Miss Elizabeth Smith; to the Master of Ceremonies.

Mrs. Pinner, who is the President of the new local League showed the film, "Found in Hawaii." This film was recently produced under the supervision of the Territorial Nutrition Committee. This is a colorful nutrition film portraying some of the ways of living both in old and present-day Hawaii and aroused much interest among the group.

NEWS FROM HONOLULU HOSPITALS

St. Francis Hospital

The following graduate nurses were added to the staff during the last several months:

Miss Dora Dean Baldocchi
(Mary's Help College of Nursing, California)
Miss Marie Finnelli
(Queen of Angels College of Nursing, California)
Miss Lorraine E. Filliger
(St. Mary's Hospital School of Nursing, Oregon)
Miss Jacqueline M. Kennedy
(Mary's Help College of Nursing, California)
Miss Lorraine Kettler
(Queen of Angels College of Nursing, California)
Miss Katherine M. Marta
(Mary's Help College of Nursing, California)
Miss Arlene W. Allen
(University of Portland College of Nursing)
Miss Marjorie Ruth Allsop
(Roseland Community Hospital School of Nursing, Illinois)
Miss Guida Viola Edmond
(De Paul School of Nursing, Missouri)
Miss Madeline Elizabeth Feehan
(St. Francis Hospital, California)
Miss Thelma L. Galbreath
(University of Oregon Training School for Nurses, Oregon)
Miss Jean Powell Harris
(Presbyterian Hospital, New York)
Miss Anna Marie Haukebo
(Northwestern Hospital, Minnesota)
Miss Geneva Pearl Houck
(Sprague Hospital Training School, So. Dakota)
Miss Dorothy D. Kronebusch
(St. Mary's Hospital, Minnesota)
Miss Mary Ann Mikulic
(University of Portland College of Nursing, Oregon)
Mrs. Madonna Helen Rudae
(St. Alexis Hospital, North Dakota)
Miss Monica Elizabeth Schumacher
(De Paul Hospital School of Nursing, Missouri)
Miss Lucille M. Buehner
(Sioux Valley Hospital, South Dakota)
Miss Lillian Durant Dole
(Waltham General Hospital, Massachusetts)
Miss Eunice J. Fors
(Good Samaritan Training School for Nursing, Oregon)
Mrs. Martha K. Irish
(St. Francis Hospital School of Nursing, Honolulu)
Miss Lillian Jurenka
(Sacred Heart Hospital School of Nursing, Montana)
Miss Phyllis Kohler
(St. Joseph's Hospital, Minnesota)
Miss Margaret Kuhrey
(Sacred Heart Hospital School of Nursing, Montana)
Miss Florence Stevenson
(Seattle General Hospital, Washington)
Miss Geraldine Wells
(University of Portland College of Nursing, Oregon)

The new premature unit is expected to be in operation soon. Two of our nurses, Miss Dorothy Ikehara and Miss Gladys Matsunaga, left for the Mainland on September 28 for graduate study in the care of prematures. Miss Bernadette Yoshina, who has been on the mainland since March, 1947, returned in September to take charge of this unit.

Graduation ceremonies were held on August 31 in the Hospital Chapel for five graduating students. Activities held in honor of the graduates were a Junior-Senior dinner at Queen's Surf, dinner at the Moana Hotel, Senior ball in the Nurses' Home and a faculty breakfast following mass in the Hospital.

Leahi Hospital

Four graduate nurses, Miss Myrna Campbell, Miss Myra Lam, Mrs. Margaret Makekau, and Miss Willa Shell, completed the two months' graduate program in tuberculosis nursing recently. Miss Campbell and Miss Lam have joined the staff at Leahi Hospital, and Mrs. Margaret Makekau returned to the public health nursing staff of the Territorial Health Department, and has been assigned to Leahi Out-Patient Department. Miss Willa Shell returned to her position as public health nurse on Kauai.

Since March 1, 1946, forty-four student nurses from the Kuakini General and St. Francis Hospitals have completed the affiliation at Leahi Hospital in the student nurse course in tuberculosis nursing. In the September-October class, seven students are enrolled.

The Board for the Licensing of Nurses has approved the courses for affiliating students and for graduate nurse students. The Veterans' Administration has also approved the graduate course for advanced training for veterans.

In September and October, a special shortened course consisting of 48 hours of classes, observation, and clinical experience on the hospital wards, was offered to the public health nursing students from the University of Hawaii. Eleven P.H.N. students attended the course.

Leahi Hospital has an extensive inservice program for new graduate nurses. It begins immediately upon the first day of employment and continues thereafter for several weeks. It includes orientation to the hospital, review of Communicable Disease technique, procedures, and medical and nursing classes in tuberculosis.

Recent new additions to the graduate nurse staff are:

Miss Toshiko Takao
(Columbus Hospital, Seattle, Washington)
Miss Cora M. Brooks
(Woodstock General Hospital, Canada)
Miss Alice Hutzelman
(Holy Name of Jesus Missionary Hospital, Gadsdeu, Alabama)
Mrs. Cecelia Leona Furlong
(Mercy Hospital, Pennsylvania)
Miss Lourdes Zamboni
(St. Louis City Hospital, St. Louis, Missouri)
Miss Margaret N. Scott
(Calgary General Hospital, Canada)
Miss Nadine Carpenter
(Youngstown Hospital, Youngstown, Ohio)

The Staff education program for September-October consisted of classes on mental hygiene, psychopathology of tuberculosis, and tuberculosis nursing.

Shriners' Hospital for Crippled Children

Miss Elizabeth Dill (Mercy Hospital, Colorado) has joined the staff as surgical supervisor. She was formerly employed at Paia Hospital, Maui.

Children's Hospital

New nurses on the staff since August are:

Miss Edith Isbell (Mercy Hospital, Michigan; postgraduate in surgery, Cook County Hospital, Chicago) is new surgical supervisor
Miss Donna Dunning (St. Luke's, Idaho)
Miss Margaret Rosen (Swedish Hospital, Washington)
Mrs. Marie Link Lam (St. Cloud Hospital, Minnesota)

Kuakini General Hospital

Miss Mary Hugo, Director of Nurses, announces the following new additions to the nursing staff:

Miss Margetan Bourdon
(Providence School of Nursing, Washington)
Miss Anne Lowring
(Providence School of Nursing, Washington)
Miss Anne Townsend
(Hillcrest Universal Hospital, California)
Miss Mildred Simmons
(Port Angeles General Hospital, California)
Mrs. Winnifred LaLonde
(Mercy Hospital, Michigan)
Mrs. E. Deakin (New York), part-time
Miss Y. Urasaki
(Kuakini Hospital, Class of 1947)

Miss Elizabeth Koenig (St. Luke's Hospital, New York) has been temporarily appointed to the faculty. Mrs. Mary Logan, member of the faculty, is vacationing on the mainland.

Misses A. Yano and E. Taketa, graduates of Kuakini School of Nursing, left on the September 12 sailing of the Matsonia to take post-graduate work in Pediatrics at Children's Hospital, Washington, D. C.

Miss Betty Brault, formerly operating room nurse, resigned to return to her home in Washington, after having been on the Kuakini staff for one year.

Vacationing on Hawaii, Maui, and Molokai recently were Miss Lillian Joyce Freas, obstetrical supervisor, and Miss Marie Freeman, pediatric head nurse.

Mrs. Kimiye Tomoyasu (Kuakini Hospital), formerly supervisor of central supply department, gave birth to a baby girl in September.

Five Kuakini graduates, all presently on the nursing staff, have matriculated as part-time students at the University of Hawaii this fall. They are: Misses Hatsumi Chinen, Hatsumi Araki, Michiko Kikugawa, Esther Igarashi, and Sumie Taketa.

* * *

PUBLIC HEALTH NEWS

We have welcomed the following nurses to our Honolulu Staff:

Miss Agnes Parrish, Miss Miyoko Okahata, Miss Edna Saito, Miss Natsuyo Oshiro, Mrs. Dorothy Tong and Miss Marian Sanford who are graduates of the 1946-47 course of public health nursing at the University of Hawaii.

Mrs. Jeanette Bedwell has arrived from the University of Michigan and Miss Carol Reefe, from the Sacramento City Health Department staff. Miss Martha Rothwell, who has been at Palama Settlement and who has been associated with the Health Department there for several years but who has been recently doing x-ray work, has joined the staff. Mrs. Lillian Mau has returned to the Health Department after several years of absence. Miss Gloria Williams went to the mainland last December, but because of an automobile accident (an injured knee) was not able to return until the first of September. She came back to us as Mrs. J. P. Foster.

Eight of the Honolulu Health Department nurses are on the mainland: Miss Rose Hee, Miss Betty Oberlies, Miss Betsy Boylin and Miss Toshiko Matsui have left for further study. Miss Elizabeth Boeker and Miss Priscilla Thorsen have left to take up other positions, Miss Bella Chur is to be married, and Mrs. Marion Hamilton has returned to her family.

Mrs. Vera Hanzel who has been loaned to us for almost two years by the United States Public Health Service is studying mental hygiene at the University of Minnesota. Mrs. Flora Ozaki is also on educational leave at the University of Hawaii.

Transfers have been: Mrs. Loretta Kaluna to the island of Hawaii; Miss Grace Tanabe and Miss Kimie Tamashiro to Kauai and Miss Ruth Imai from Kauai to Kapahulu.

LAURA A. DRAPER, Chief
Bureau of Public Health Nursing

NURSES' ASSOCIATION, CITY AND COUNTY OF HONOLULU

The Nurses' Association, City and County of Honolulu, held their final meeting of the 1946-47 season on May 5. Dr. C. E. Fronk was the guest speaker and gave a most interesting talk on Big Game Hunting.

The first meeting of the new year was held on September 8, 1947, in the Mabel Smyth Auditorium.

The minutes of the last meeting were read and approved.

Since the treasurer's report was not complete it was dispensed with.

A report of the Board of Directors was given by Miss Draper.

Calendars that were to be sold to raise funds for the Nurses' Bulletin were presented to the members by Miss Draper.

There followed a discussion of the letter sent to members of the Nurses' Association Territory of Hawaii regarding contributions to the Florence Nightingale Memorial School for Nurses, Bordeaux, France.

Miss Otto gave a report on blood donations.

Dr. Cloward gave an interesting talk on the modern treatment and symptoms of anterior poliomyelitis.

Following the lecture roll call was taken. Present were nurses from the following groups:

General	4	Public Health nurses	28
Institutional	16	Unclassified	4
Private duty	7	Students	3
Office	3		
School nurses	4		—
Industrial nurses	0	Total	71

The following 43 new members were introduced:

Akazawa, Miyo	St. Francis Hospital, Honolulu
Apo, Cyrilla	St. Francis Hospital, Honolulu
Arashiro, Doris	St. Francis Hospital, Honolulu
Bal, Aldona	Boston City Hospital, Boston, Mass.
Beers, Dorothy	Newark Beth Israel Hospital, Newark, N. J.
Bird, E. Vivienne	St. Luke's Train. Sch., San Francisco, Cal.
Choi, Stella Marie	St. Francis Hospital, Honolulu
De Metz, Bonnie	Charity Hospital, New Orleans, La.
Denna, Hazel	Long Island College Hospital, Brooklyn, N. Y.
Goodrich, Mary	St. Francis Hospital, Honolulu
Hart, Grace	Illinois Train. School, Chicago, Ill.
Hayashida, Annie Lew	Queen's Hospital, Honolulu
Hiraoka, Kiyoko	Kuakini Hospital, Honolulu
Howard, Nelle	Central Islip Hosp., Central Islip, L. I., N. Y.
Ihara, Kimie	St. Francis Hospital, Honolulu
Iseri, Sawayo	Kuakini Hospital, Honolulu
Ishii, Louisa N.	Kuakini Hospital, Honolulu
Johnson, Elaine P.	Idaho Falls L.D.S. Sch. of Nur., Idaho Falls
Kaluna, Loretta	Philadelphia Gen. Hosp., Philadelphia, Pa.
Maison, Dorothy Y.	Piedmont Hospital, Atlanta, Georgia
McCluskey, Lauretta	Englewood Hospital, Englewood, N. J.
McKnight, Margaret	Fifth Avenue Hosp., New York City, N. Y.
Miller, Laura H.	St. Vincent Hospital, Birmingham, Ala.
Miller, Margaret	Catawba San. & Med. College of Virginia
Mitchell, Bertha M.	St. Agnes Hospital, Fond du Lac, Wisc.
Morris, Maudie L.	Research Hospital, Kansas City, Mo.
Nakamura, Akiko	St. Francis Hospital, Honolulu
Noah, Anna L.	Good Samaritan Hospital, Portland, Ore.
Num, Elizabeth	Queen's Hospital, Honolulu
Pante, Segunda	Queen's Hospital, Honolulu
Peck, Charlotte	Western Reserve University, Cleveland, Ohio
Schutte, Margharethe	Queen's Hospital, Honolulu
Smithson, Dorothy	Bessemer Gen. Hospital, Bessemer, Ala.
Sorrell, Lena	Minnequa Sch. of Nurs., Corwin Hosp., Pueblo
Stuart, Ida L.	New York City & Bellevue, Welfare Is., N. Y.
Tada, Eleanor	Queen's Hospital, Honolulu
Tanaka, Alice	St. Francis Hospital, Honolulu
Thomas, Kathryn	Good Samaritan Hospital, Portland, Oregon
Thomson, Evelyne	Knapp College of Nursing, Santa Barbara, Cal.
Tolle, Eloise	T.C.I.&R.R.Co. Employees Hosp., Bram, Ala.
Yanagida, Lucy	Hamline Asbury Sch. of Nurs., Minneapolis
Yogi, Thelma	Kuakini Hospital, Honolulu
Yorimoto, Mariko	St. Francis Hospital, Honolulu

AMELIA MATTOS, R.N.
Secretary

NURSES' ASSOCIATION, COUNTY OF HAWAII

In June, the Nurses' Association held a most successful bridge party. Over two hundred guests enjoyed the evening and a very gratifying cash return was added to the association's treasury.

The Jane Service Memorial Library has received several donations of money recently, one from the Women's Club of Hilo. This reference library will be located in the new Hilo Library which is under construction at the present time. Several donations of books have been received from friends of Miss Service.

Miss Virginia Jones and Mrs. Florence Thompson conducted classes in Hilo on child care. Many Public Health and Plantation Nurses attended. A dinner honoring Miss Jones and Mrs. Thompson was held at Moto's Inn following the completion of the classes.

A Banana Split Party which developed into a combination shower and farewell was given by the nurses of the Hilo Memorial Hospital in July in the Nurses' Cottage. The farewell was for Miss Ida Olson and Miss Betty Mann who had served on the staff of the hospital for one year, and who were returning to their homes in Portland, Oregon. Miss Inez Lindgren, who became Mrs. Lee Pearson on July 30, was the recipient of many lovely gifts.

Mrs. Para Lee Icard of Hilo Memorial Hospital and Mr. Ronald Payne of Hilo were married on June 30.

Miss Eunice Graham, Director of Nurses at Puumaile, returned to the hospital in September after several weeks spent at her home in Vancouver, B. C.

Mrs. Dorothy Moll, Miss Clara Mitchell and Miss Mary Stanley returned to San Francisco in July after a most interesting summer. The three drove across the states visiting Boulder Dam, Grand Canyon and the Caverns of Luray enroute to the east, arriving in New York in May. Mrs. Moll and Miss Mitchell left by plane for Switzerland. While in Europe, they toured through Switzerland, France, Belgium, Holland and Italy, but were not allowed to enter Germany. Early in August they joined Miss Stanley in Meriden, Connecticut, where she had spent the summer with relatives. Extreme heat was encountered on the return trip to the west coast, making night driving much more comfortable than daytime travel. Miss Mitchell and Miss Stanley returned to Hilo in August. Mrs. Moll remained in California where she intends to make her future home.

MARY STANLEY

* * *

NEWS

Miss Phoebe Namba, graduate of Leahi tuberculosis nursing course in April and staff nurse at Samuel Mahelona Hospital, Kauai, visited Leahi Hospital in October. Of interest was her report of the tuberculosis nursing skit, "Design for a Cure," which was presented by Kauai health workers twice this fall; once to the Kauai Nurses' Association and once to employees of the Mahelona Hospital staff. The cast also plans to present the skit to other health workers on Kauai.

"Design for a Cure" was written and presented by Leahi and Health Department staff members to the Territorial Nurses' Association at its recent convention in Honolulu.

Miss Namba also reports that orderlies and practical nurse classes are being conducted twice weekly at Mahelona Hospital.

WORKMEN'S COMPENSATION IN HAWAII

William M. Douglas*

The Hawaii Workmen's Compensation Law became effective July 1, 1915, by the passage of Act 221. The first industrial accident board meeting was held June 9, 1915. Members of the board were: Messrs. A. J. Campbell, F. E. Steere, F. O. Boyer, R. E. Booth and S. E. Paxton. Early sponsors of workmen's compensation legislation were Judge Walter F. Frear and the late Senator Ambrose J. Wirtz. The original law has been amended by nearly every legislature since 1915. There is little similarity to the original benefits, although the standard form of legislation has been retained.

The principle of workmen's compensation has been universally accepted. This system of compensating the victims of occupational injuries has been abundantly justified. What was new in the United States a quarter century ago is now common-place and has reached maturity. All states except Mississippi today have workmen's compensation laws.

In the early years, the burden of the consequences of industrial accidents such as actual illness, medical expenses and loss of wages was borne entirely by the worker himself, except in those instances where the employer was conscious of a moral obligation to his employee. Although legislation for the welfare of workers was already being promulgated, it had not yet progressed to the state of requiring supervision of industrial accidents.

Workmen's compensation laws, in their present state of development, are designed to give an injured worker prompt medical care and money payments at the cost of the employer and with a minimum of inconvenience to the worker. Before these laws were passed, if the worker sued his employer for damages, he had to prove that the employer was negligent. The court remedy was slow, costly and uncertain. Under the compensation law, the question of fault or blame for the accident is not raised, since the cost of industrial injuries is now considered part of the expense of production. Injured workers are thus spared the difficulties and delays of court procedure. The ultimate objective of any compensation law is to furnish benefits that will insure a reasonable standard of living to victims of work accidents and occupational diseases.

The scope and intent of the law extends beyond the simple payment of compensation for loss of wages on account of physical disability caused by industrial accident. Industry falls short of legal and moral obligation if it does not render ample and adequate medical and surgical treatment to an injured workman from the time of his injury to the time he is restored to as near his former physical condition as possible. What this treatment and service consist of and how far legislation permits of their fulfillment will now be considered.

Medical and surgical service in industrial accidents should consist of first aid, initial surgical treatment, after treatment, and the reconstruction or secondary treatment when necessary. The role of first-aid in the prevention of complications of industrial accidents has been sufficiently emphasized to need no more than mention. In actual practice, this is carried out by both skilled and unskilled laymen. More adequate treatment will be rendered with the best results where trained personnel supervises this phase of medical attention. The necessity for trained first-aid personnel is apparent. Too long an interval sometimes elapses between the time of injury and the initial surgical treatment by a competent surgeon. This fact, lack of prompt and competent first aid, is one of the most important causes of unsatisfactory end results. To distinguish between the first aid and first treatment rendered by a competent surgeon, the latter is designated as emergency surgical treatment. If that treatment should include suturing, amputation or the reduction of a fracture, it should be designated as initial surgical treatment. An attending physician rendering treatment should have proper understanding of the injured's mental reaction to his disability, to his employer and to the possibility of malingering and protracted illness.

In Hawaii the cost of medical and hospital service resulting from an industrial injury is unlimited; the only requirement is that the treatment be of a certain standard. By unlimited medical service we mean not only treatment by a surgeon and hospital expenses but also medication, artificial limbs, and other prosthetic appliances, as well as nursing service and even transportation. Fees of physicians are subject to approval by the Bureau of Workmen's Compensation. Physicians' fees requiring adjustment are referred to the Industrial Accident Fee Schedule Committee of the Hawaii Territorial Medical Association except in cases where the physician is not a member of that organization.

Choice of physician is unhampered, but it rests with the employer and not the injured employee.*

Closely related to medical attention furnished the injured worker is the need for rehabilitation. This is provided by Federal and Territorial governments on a cooperative basis.

An employee who has sustained an injury while at work or going to and from work in transporta-

* Assistant in Charge, Bureau of Workmen's Compensation.

* See Editorial, p. 129.—Ed.

tion furnished by the employer is generally covered by the workmen's compensation law. The employer is required by law to file a report promptly. Questions often arise as to the compensability of an injury or the payment of fees for services rendered by the attending physician. Such cases should be referred to the Bureau of Workmen's Compensation. Other benefits provided by the local law in addition to unlimited medical and hospital expense include two-thirds of the employee's weekly wage during total disability, with a maximum of $25 per week for 300 weeks, or a total of $7,500, set by law. For permanent disabilities a schedule is provided and various members of the body are classified for compensation purposes. For example, the loss of the fourth finger is compensated at seven weeks, the first finger commonly called the index finger, twenty-eight weeks, the second or middle finger eighteen weeks, and the third finger or ring finger seventeen weeks.

The Hawaii Workmen's Compensation Law is classified as compulsory and all employers except eleemosynary institutions are required to file security for payment of workmen's compensation. This may be done by obtaining workmen's compensation insurance or qualifying as a self-insurer. Whenever an employer has obtained workmen's compensation insurance, the attending physician forwards his reports and bills directly to the insurance company.

In the administration of workmen's compensation, there have been some interesting cases. We recorded one death from 300 bee stings. Reports of dog bites and centipede bites are received regularly [and are frequently held as compensable—Ed.]. One unfortunate individual sustained a bee sting and a centipede bite in the same accident. The worst single catastrophe was the tidal wave on April 1, 1946, when 11 deaths were reported.

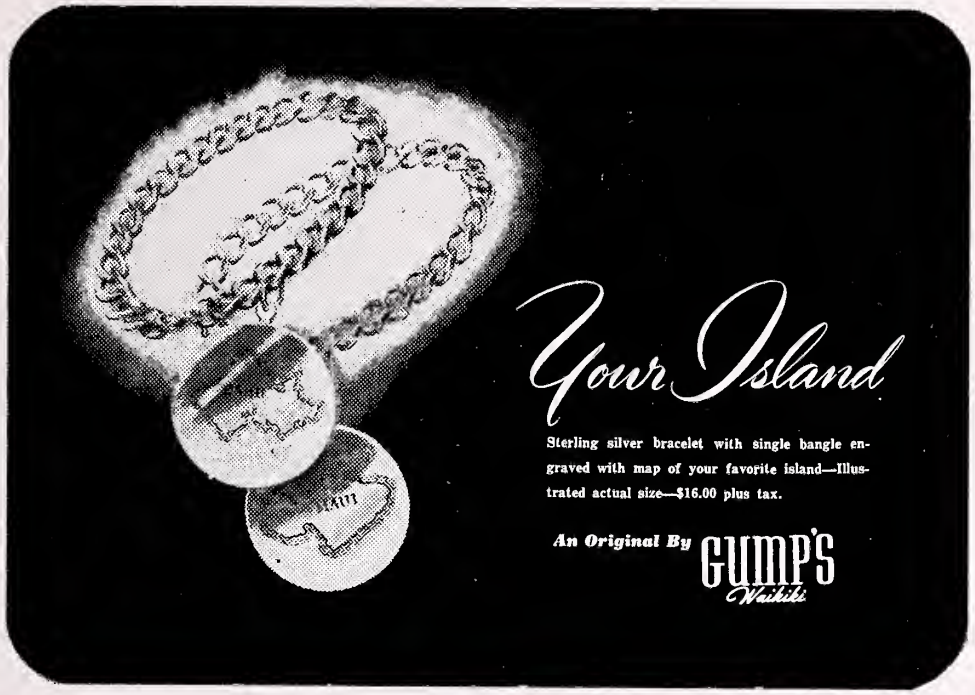
The death rate is climbing steadily in Hawaii, and approximately 200,000 workers face death or injury daily in Hawaiian industries and work places. The Bureau of Workmen's Compensation is, comparatively speaking, understaffed. Of paramount importance to the worker is accident prevention. Only one safety engineer for the entire Territory has been authorized to date. Most large organizations in the Territory have instituted voluntary safety programs.

This article would not be complete without mention of the excellent work being conducted in the field of pre-employment physical examinations. Many large companies are making a pre-employment physical examination a part of the work contract. The benefits of such a plan are very important to both employees and employers. Every encouragement is due the physicians specializing in these studies.

In closing, a timely reminder is in order to the effect that persons who make inquiries concerning their rights under the workmen's compensation law should be referred to the Bureau of Workmen's Compensation. Individuals not connected with the administration of the act should not attempt to give advice to injured workers.

Further information concerning the operation of the Workmen's Compensation Law may be obtained by communicating with the Bureau of Workmen's Compensation, Territorial Office Building, Honolulu 2, T. H.





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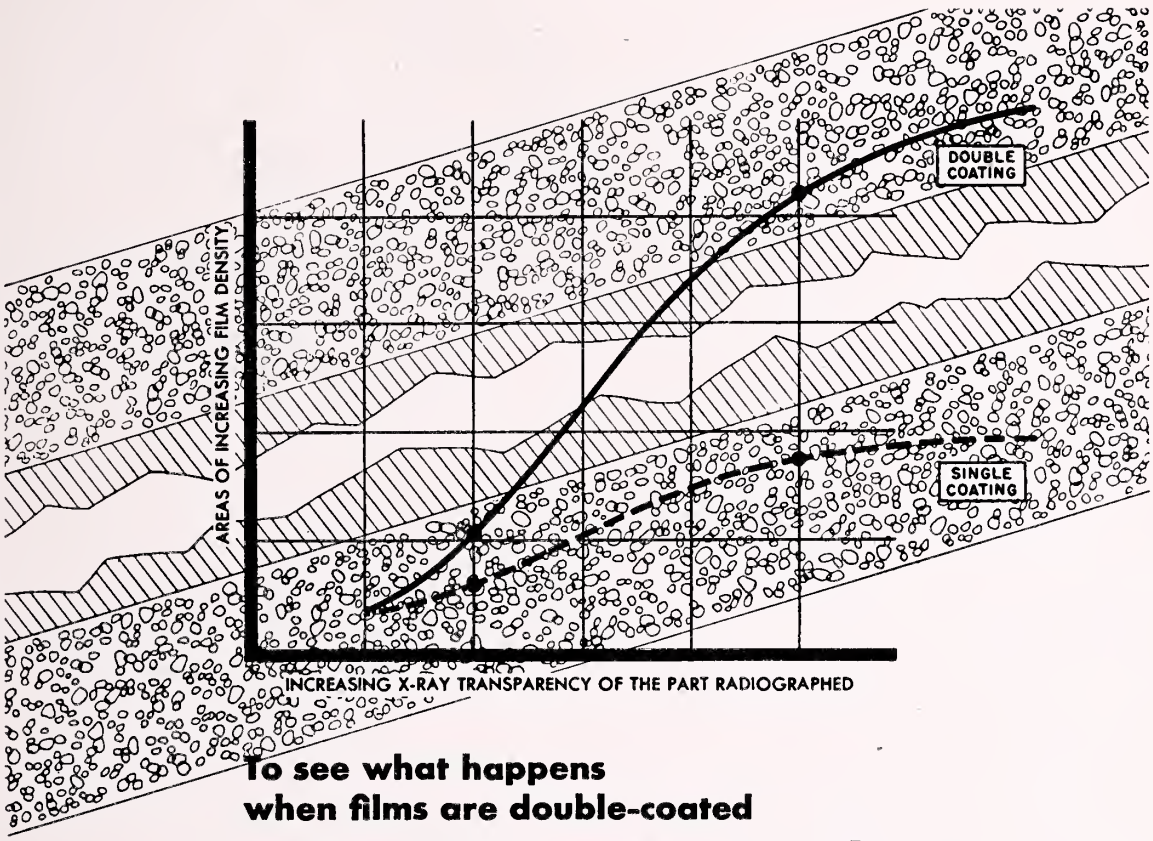
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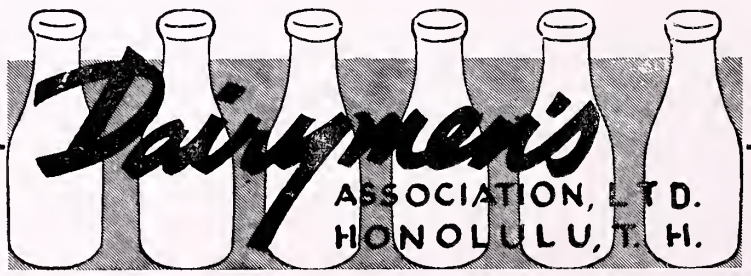
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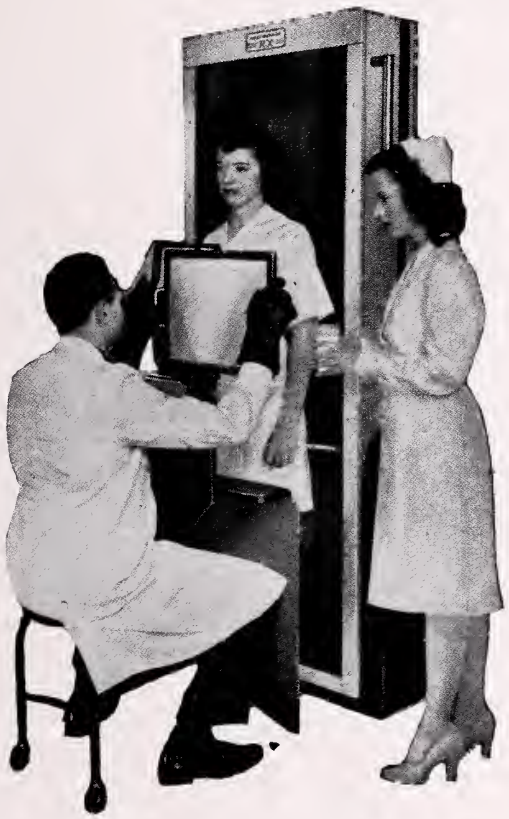
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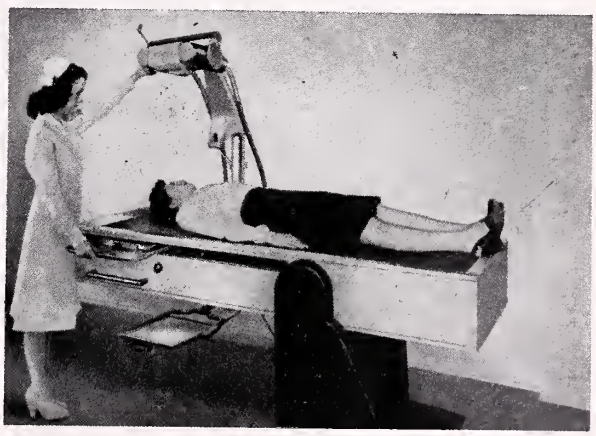
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1. Lennox, W. G. (1947), Tridione in the Treatment of Epilepsy, J. Amer. Med. Assn., 134:138, May 10. 2. DeJong, R. N. (1946), Further Observations on the Use of Tridione in the Control of Psychomotor Attacks, Am. J. Psychiat., 103:162, Sept.

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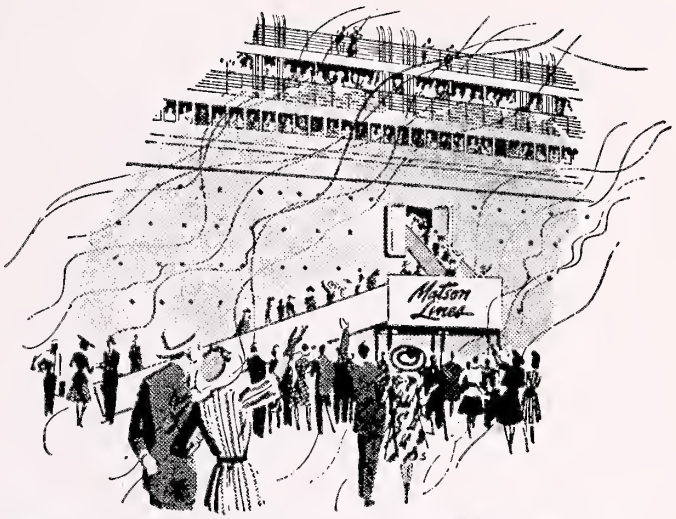
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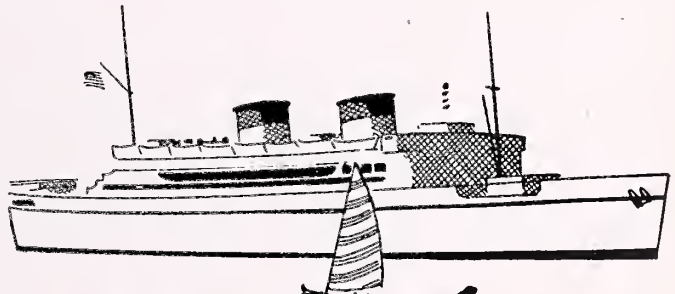
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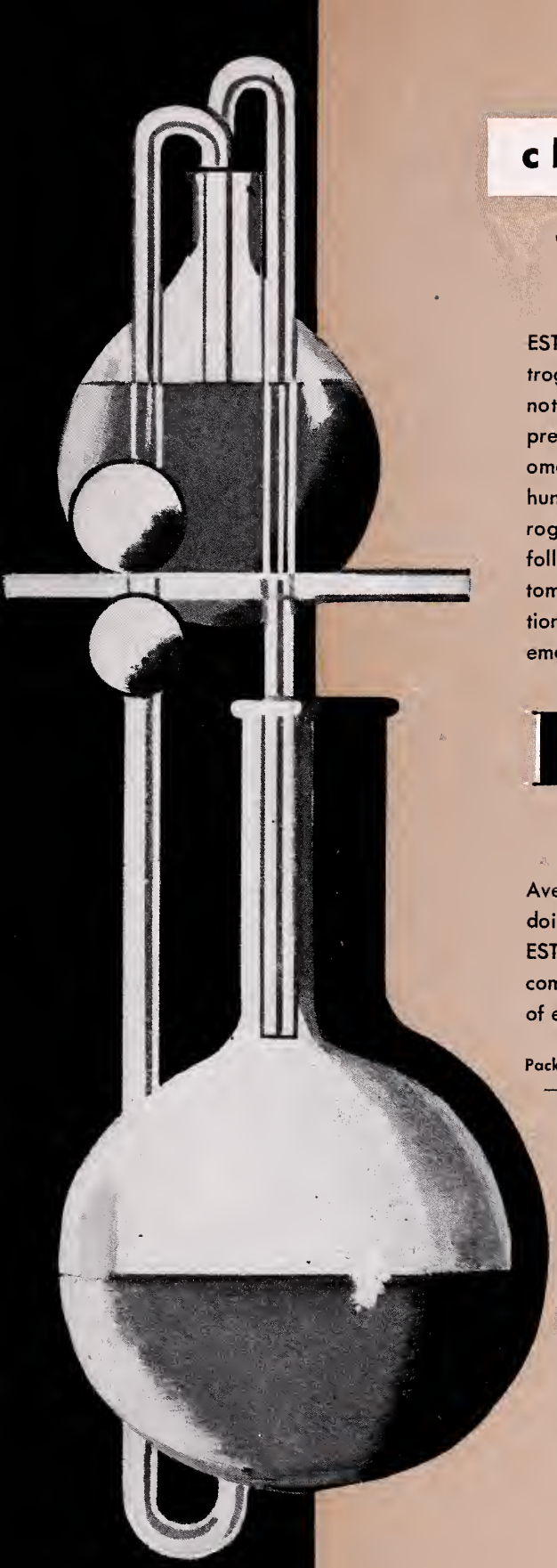
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1. Bickers, W.: Am. J. Obst. & Gynec. 51:100, 1946.

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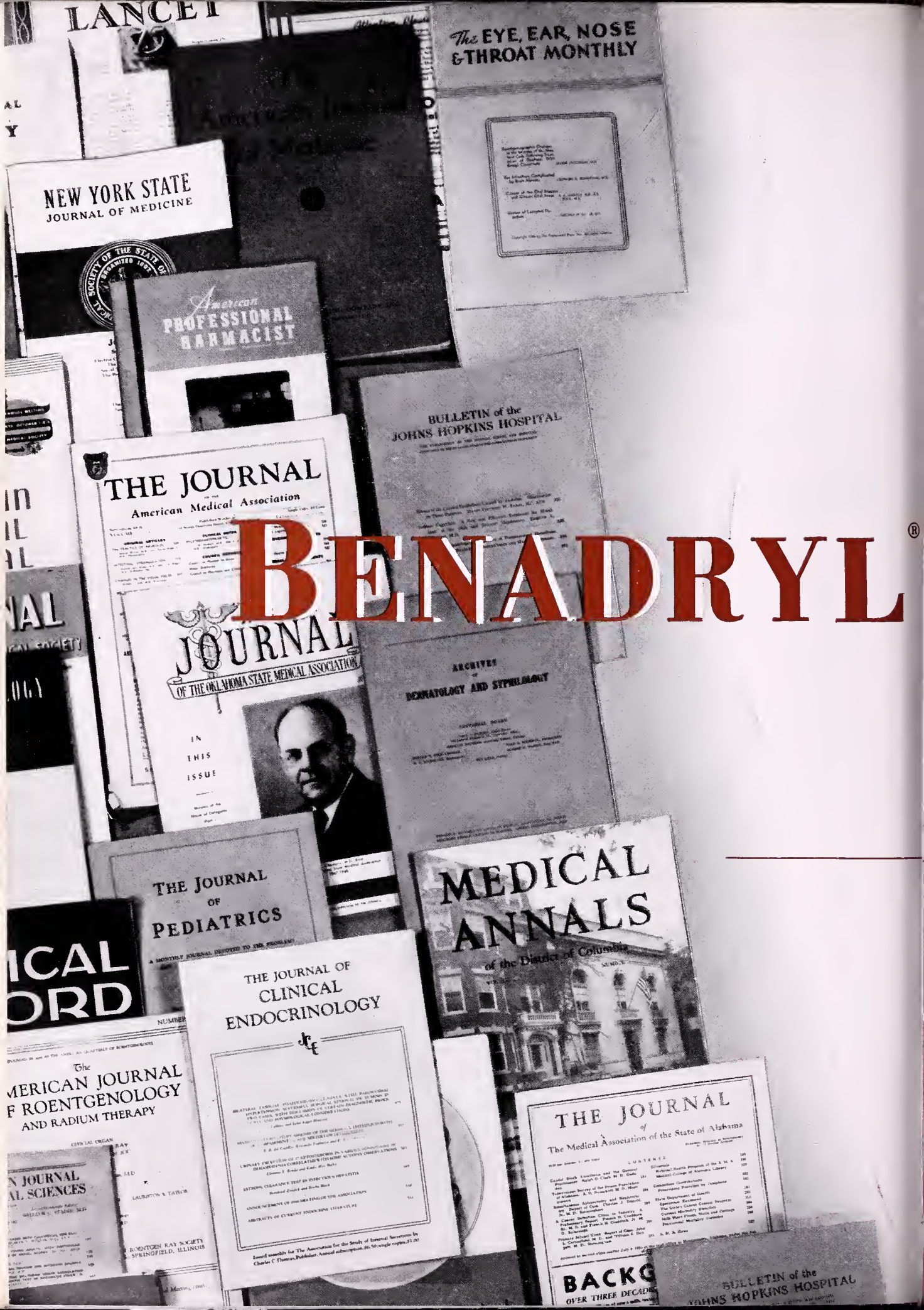
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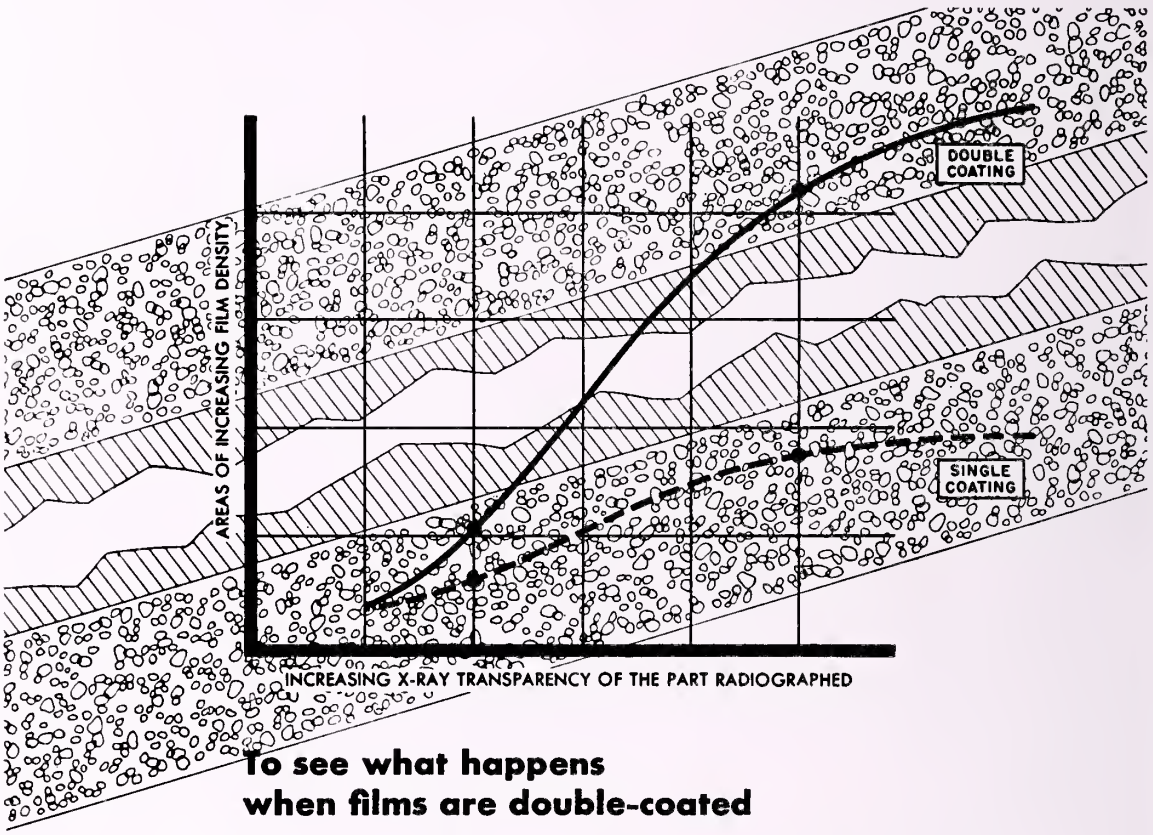
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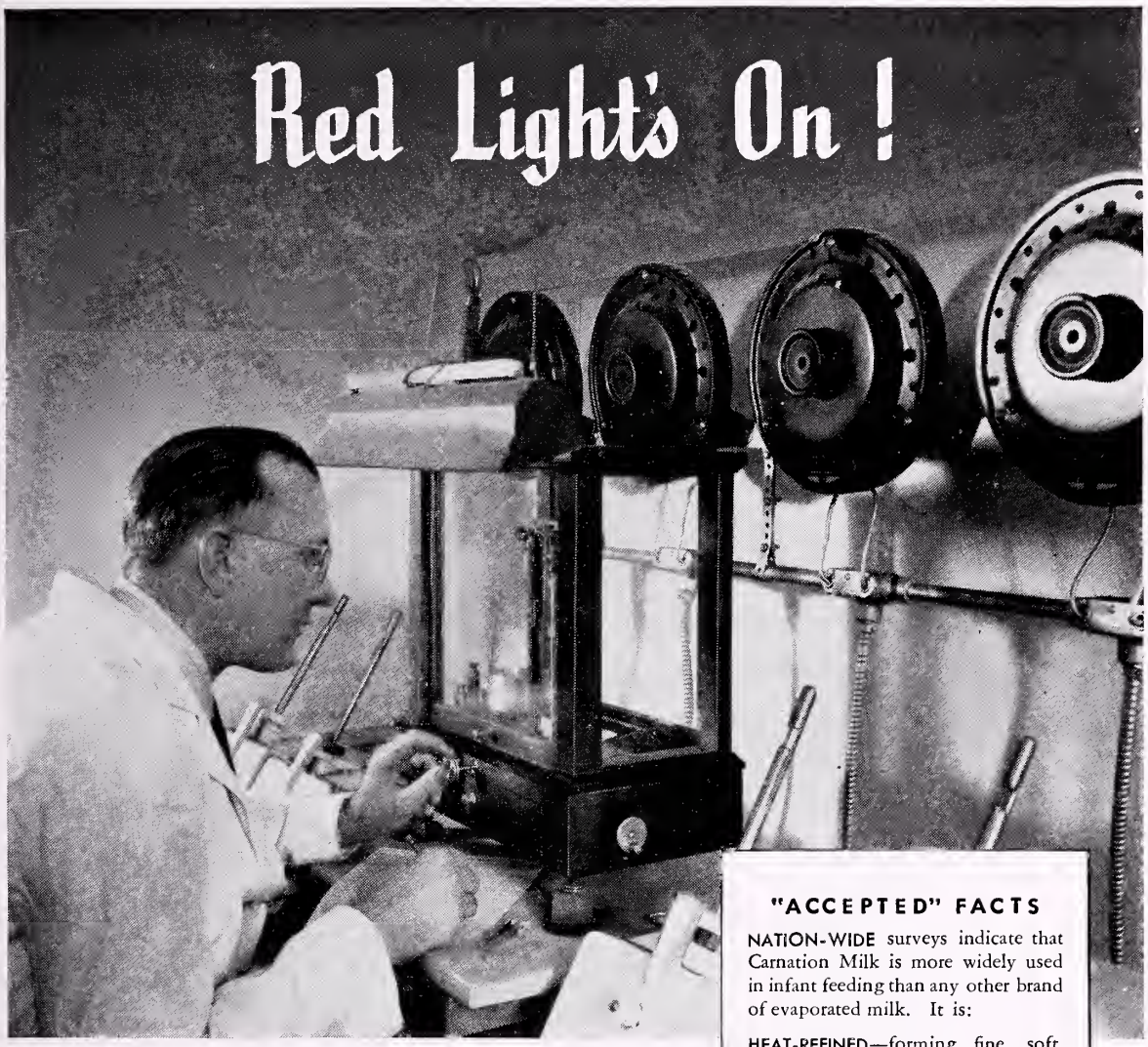
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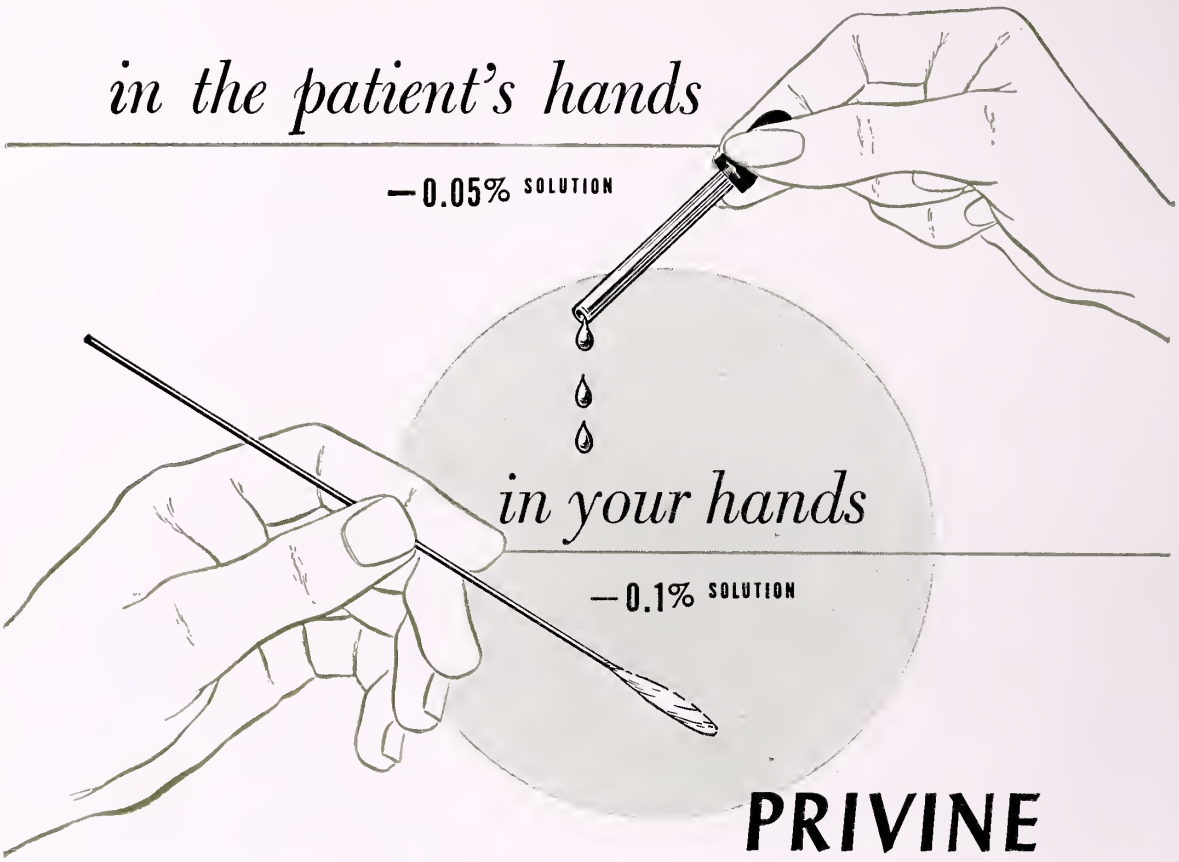
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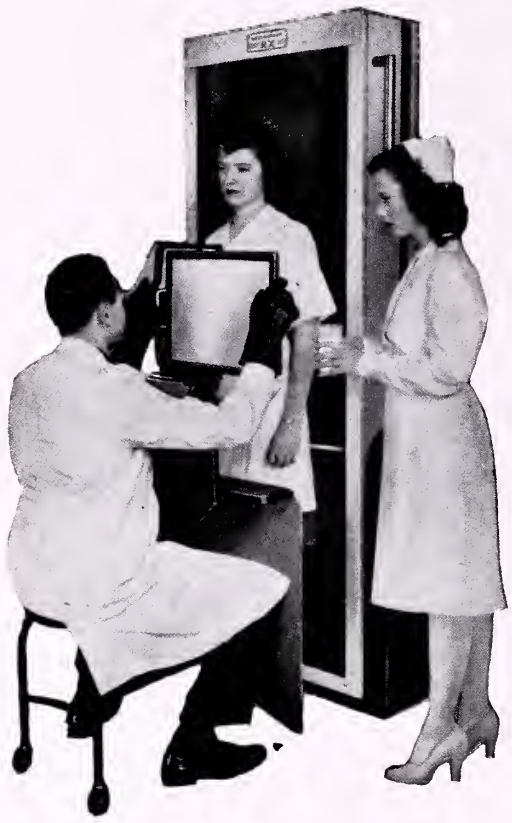
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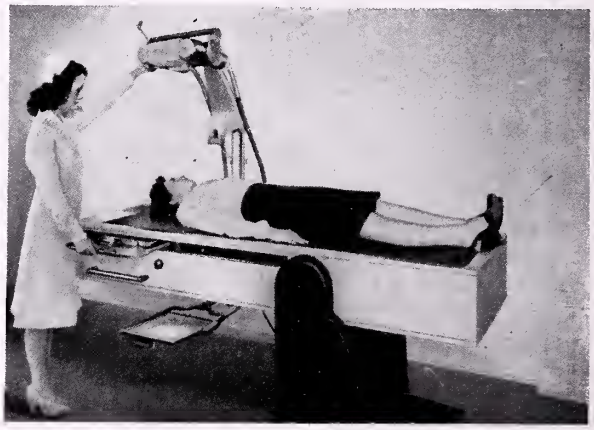
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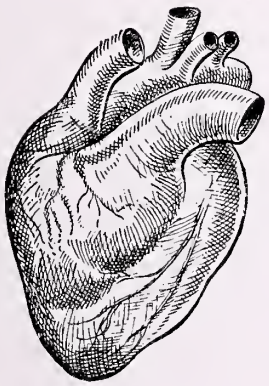


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NUMBER 3

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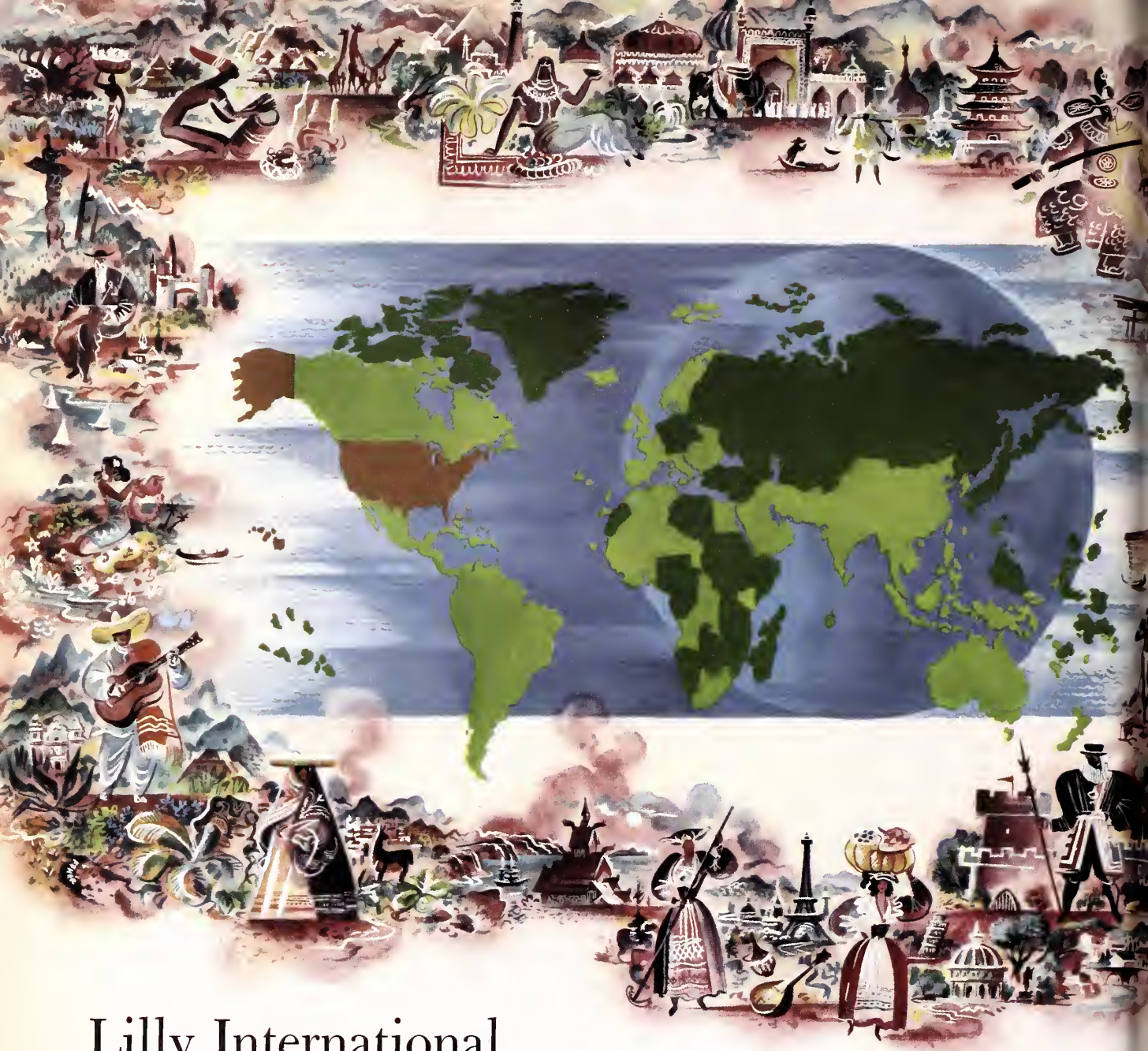
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The Law Relating to Medico-Legal Autopsies in the Territory of Hawaii

ALVIN V. MAJOSKA, M.D.
HONOLULU

SINCE THE creation of the position of City and County Pathologist on January 1, 1945, for the purpose of placing into the hands of one qualified person the responsibility of performing autopsies for the City and County of Honolulu, there has been a gradual realization of the necessity for a complete revision of the law, insofar as coroner's autopsies are concerned. An investigation has revealed that present practices are based largely on various individuals' notions regarding mainland or local precedent, rather than on knowledge of—or, indeed, existence of—pertinent laws. It is intended that this report will clarify and criticize, constructively, the present system.

Existing Laws in Hawaii

There are few paragraphs of law and Board of Health regulations relating to coroner's autopsies in the Territory of Hawaii. The only ones the writer has been able to find are as follows:

Public Health Regulations of the Board of Health

Section 169, Para. 3. In the case of a death without medical attendance, or continued absence of the attending physician for at least forty-eight hours, it shall be the duty of the undertaker, or person acting as such to notify the coroner of such death and the coroner shall thereupon refer the case to the *proper health officer* [italics mine] for investigation and certification to a standard certificate of death required for a burial permit. The health officer shall state in the certificate the disease causing death, or if the death be from external cause (1) the manner and means of death and (2) whether accidental, suicidal or homicidal. Only when the coroner is unable to cause a certificate of death to be prepared as required by law, then, and then only, shall the registrar prepare the standard certificate of death upon the proper application of and statement, under oath, of the nearest relative, or guardian, and of at least two witnesses having adequate knowledge of the fact of death. All affidavits shall be filed with the local registrar and later filed by him with the Registrar General at the close of the month.

Revised Laws of Hawaii 1945

Section 10913. Autopsies to be performed. The Coroner shall have a complete autopsy performed of the remains of any human body appearing to have come to death by poisoning, violence, or *in any suspicious manner* [italics mine]. Such autopsies shall be performed by the City and County Physician or his assistant in the City and County of Honolulu and in other counties by any government physician designated by the Coroner. Such physician may request the services of a recognized pathologist to assist in the performance of any autopsy. If the Coroner is of the opinion that further or additional investigation as to the cause of death shall be made, he shall have authority to have the same made, the expenses of which shall be paid by the county concerned.

Section 3123, Para. 3. There shall be a standard certificate of death, the form and contents of which shall be prescribed by the board, and it shall be the duty of the registrar to make out said certificate when the report of death is from a source other than an attending physician or surgeon; and when the report of death is by an attending physician or surgeon such certificate shall be made out and signed by such physician or surgeon.

Revised Instructions to the Government Physicians and Registrars

(Approved at a regular meeting of the Board of Health held October 28, 1943).

Section 1. Autopsies—unattended deaths.

1. Government physicians shall perform *complete autopsies in all cases* [italics mine] in which the certificate of death shows the cause of death to be unsatisfactory or unknown.

2. Government physicians, in the case of deaths without medical attendance (or continued absence of the attending physician for at least forty-eight hours), shall perform a complete autopsy in all cases referred to them by the Coroner for view and immediate inquiry, if a definite cause of death cannot be ascertained after viewing the body and making a close investigation into the cause of death.

3. The government physician shall not approve the certificate of death as required for a burial or cremation permit nor shall the burial or cremation permit be issued unless the certificate of death shall have been approved by the Office of the Coroner and countersigned by the *coroner's physician* [italics mine], if the death was unattended, even though the attending physician assumed the full responsibility up to the time of death as certified to the cause of death.

Comments

Analyzing these laws and regulations we find the following *readily* apparent flaws:

1. Section 169, Paragraph 3 of the Public Health Regulations of the Board of Health—who is the "proper health officer" to whom a death shall be referred by the Coroner? The position is nowhere defined in the law. The death is therefore referred to a mythical individual. Yet his duties in connection with the death are clearly defined!

2. Section 10913 of the Revised Laws of Hawaii 1945—"in any suspicious manner." This

nebulous term is much too poorly defined. There *must be evidence* to substantiate "suspicious manner"—there is considerable legal precedent for this important statement. An autopsy done without *evidence* of "suspicious manner" is performed illegally and performance of such autopsy in good faith provides no immunity from subsequent prosecution and civil suit.

3. Section 3123, Paragraph 3 of the Revised Laws of Hawaii 1945. The question as to who signs the death certificate in the event of an unattended death, not within the jurisdiction of the Coroner, has arisen in the past. The answer to the question was recently found, after a very prolonged search, tucked away in this paragraph.

4. Revised Instructions to the Government Physicians and Registrars. Section 1, Paragraph 1. There is no leeway given the government physician to decide as to when an autopsy is necessary and when one is not necessary. It becomes mandatory for the government physician to perform a complete autopsy in all cases in which the certificate of death is unsatisfactory. It denies the physician the right to exercise his good judgment as to whether or not an autopsy is indicated and necessary. Furthermore, it is impossible to define what constitutes a "complete" autopsy. In the writer's opinion, a complete autopsy is an utter absurdity and impossibility, because regardless of how complete the autopsy may be, there are invariably other studies which might have been performed. The cost of a truly complete autopsy would be a staggering sum and one which the community could not bear. The paragraph fails to state the *purpose* of a complete autopsy. Further, this paragraph instructs the government physician to do something which he is not *lawfully empowered* to do!

Paragraph 3. This paragraph outlines the duties of the "coroner's physician"; yet such a position is nowhere defined nor does anyone know who the "coroner's physician" is!

Current Problems and Misconceptions

1. Uninformed members of the medical profession believe, for the most part, that should a death occur in a hospital within twenty-four hours (some believe forty-eight hours) of admission, the case must be investigated by the Coroner; or, in common parlance, that a "coroner's case" has been established. There is no such regulation in the Territory. The desirability of such a law will be later discussed.

2. Physicians, anxious to have an autopsy performed on their own cases, but unable to secure legal permission for performance of such autopsy, decide to "make it a coroner's case." Under the law a case is or is not a coroner's case on the basis of its own circumstances, not on the basis of someone's opinion. This, to some extent, is as it should be, but the present law does not provide for a sufficient number of situations in which a medicolegal autopsy should be performed.

3. Proper disposition of bodies in special circumstances is difficult and the procedure is unwieldy. This applies particularly to decomposed bodies which are found outside of business hours. The post-mortem examination is done as soon as possible, almost as a matter of semi-emergency, but the body, already a menace to the public health, cannot, under present circumstances, be immediately cremated because: (a) one must first ascertain who is to pay for the cremation; (b) the Office of the Coroner may be closed so that a release may not be available; (c) other unforeseen factors.

There is a definite lack of knowledge of procedure in such cases. I believe that the autopsy surgeon should have the authority to order—not merely request—a cremation forthwith, the financial and detailed secretarial work to be done later, and in those cases where private funds are unavailable, the government should be mandated to pay the bill.

4. Availability and securing of reports need clarification. The law should clearly state what agencies are entitled to copies of autopsy reports and upon whom rests the responsibility of deciding whether reports are to be made available to such agencies.

5. Jurisdiction in federal cases is not clearly defined. It is understood that certain suspicious or violent deaths occurring outside of military or government reservations are coroner's cases. Yet the Army frequently assumes jurisdiction and does not even report its findings to the Coroner's Office. Although a copy of autopsy findings is usually forwarded upon request, there are instances wherein the Army has completely failed in this obligation.

6. Although the present law clearly states that an autopsy shall be performed on the remains of any human body appearing to have come to death by violence, a recent violent death was not autopsied because of pressure brought to bear by the family of the deceased. An autopsy probably was not needed in this case but the present law *leaves no choice.* It states that an autopsy is mandatory in such cases.

7. There is considerable confusion regarding the requirement for autopsies in coroner's cases. The general opinion is that if a case is investigated by the Coroner it will thereafter be autopsied by

the City and County Pathologist. This is not true, as only those cases where death is due to violence, poisoning or in a suspicious manner, may be, and are, required to be autopsied. Although unattended deaths are investigated by the Coroner's Office, there is no legal justification for such jurisdiction. The duties of the Coroner are clearly outlined in Section 10903 of the Revised Laws of Hawaii 1945 and this paragraph states that the Coroner shall investigate "death by poisoning, violence or in any suspicious manner." By precedent, not by authority of law, unattended deaths are actually investigated by the Coroner's Office. These cases are not necessarily autopsied; they are usually merely released to the family for disposition.

8. The availability of hospital records and other information necessary in the investigation of a death is poor. In a specific instance recently encountered there was a suggestion of crime in connection with a certain death. Yet no one had the authority or power to investigate the hospital record in that case, as the hospital demanded a court subpoena for the record, and rightfully so. A subpoena could not be obtained until the following morning. Many hours of time could be lost in the apprehension of a criminal in future similar situations. The investigator (whoever he may be) should have more legal authority to perform adequate investigation. As Hayt says, "The public authorities in charge of the enforcement of the criminal law shall have the right to pertinent information concerning any patient from any hospital upon satisfying the hospital that it is reasonably pertaining to a bonafide criminal investigation."* This is the law as it exists in the state of New Jersey.

There should be no reticence on the part of the hospital to supply such information. If a physician is considered qualified to perform a medico-legal necropsy, he should be presumed to be of sufficient integrity to permit his perusal of pertinent hospital data. He might be required to sign a form stating that his examination of a certain record was in the line of official duty (in order to protect the hospital) and he should have certain credentials, such as a card or a badge or both, to present to the hospital to verify his authority to request information.

9. Release of information to newspaper should be controlled by statute. Medical information desired by newspapers must be channeled through the office of a lay person under the present rules, regulations and laws. The decision as to whether certain *medical* information should be released should not rest in the hands of a lay person but should be the duty of a physician. Second hand medical information, passed through the hands of a lay person, is usually inaccurate and might be damaging in the event of a medico-legal autopsy.

* *Some Aspects of the Confidential Character of the Hospital Medical Record* by Emanuel Hayt, LL.D., published in "Hospital Progress," 1946.

Current Procedures

The status of procedure in the event of deaths occurring in the Territory of Hawaii at the present time may be summarized as follows:

1. The death occurs under conditions supposed [the law does not specify by whom] to involve poisoning, violence or suspicious circumstances. These deaths (whether or not attended by a physician or surgeon) are investigated by the Coroner or Deputy Coroner and if the death does appear to be due to any of these factors (after a complete investigation) the Coroner has an autopsy performed. If, after the investigation, it is found that there is no evidence to indicate poisoning or violence [i.e., any external trauma], the case comes into the category of "unattended deaths."

2. The death occurs while the deceased was under the care of a physician or surgeon and the death does not come within the jurisdiction of the Coroner. Here, the death certificate is signed by the attending physician or surgeon (Section 3123, R.L.H. 1945) [whether or not he knows the cause of death. If he does not, he should state it to be "Unknown" on the certificate of death.].

3. The death occurs suddenly and does not come within the above two categories. This is an "unattended death" and is referred to the registrar for certification as to the cause of death. The law makes no provision for performing autopsies on these cases.

The above summary conforms with a recent opinion given by the City and County Attorney.

Comment

The above enumerated problems are but a few of the problems in our local community. The law is inflexible and leaves no leeway for intelligent decisions as to the necessity for autopsy. For example—an indvidual completely flattened by a steam roller must still have "a complete autopsy performed" (Section 10913, Revised Laws of Hawaii 1945). On the other hand, although someone may suspect violence or crime in connection with a death, an autopsy cannot be done legally in Hawaii unless there is *evidence*. In other communities the law makes provision for the performance of an autopsy on the basis of the opinion of the investigator. Example: A famous case in New York involves a man who was known to have chronic heart disease. He was seen running down the street and suddenly toppled over—dead. Obviously, the man had overexerted himself and his heart had quit. However, the Medical Examiner had a hunch and *in his opinion* an autopsy was indicated. At autopsy it was found that an ice pick had been plunged into the base of the skull

at the neckline above the hair line. The kinky hair of the scalp completely covered the wound and there had been practically no bleeding. The ice pick had severely lacerated a vital portion of the brain, indicating homicide. It is to be stressed that the autopsy was deemed necessary in the *opinion* of the Medical Examiner and was not mandatory by law.

It may be presumed that our present law was copied from the laws of some other community and that the necessity for radical change was never before recognized here. Other communities have been forced to recognize the inadequacy of the law (either by aroused public opinion, lawsuits or other factors) and have drastically changed their laws to conform with the more desirable Medical Examiner System or a Coroner System modeled along the same lines as the Medical Examiner System. Most of these changes are similar in each system, regardless of the name of the system, and are predicated upon the indications for, and the functions of, a medico-legal autopsy.

The Medico-legal Autopsy

A medico-legal autopsy should be regarded as indicated whenever the cause of a death or the circumstances in which it occurs are such as to indicate to any person that it may have resulted from the negligent or deliberate act of another, or from some unrecognized hazard to public health.

Every death known or suspected to have resulted from violent or unnatural causes should be investigated and certified to by a competent public official. Failure of the law to make such investigations mandatory or to provide a competent mechanism for their conduct inevitably leads to: (a) non-recognition of murder; (b) unsuccessful trials of persons who are guilty of murder; (c) suspicion and occasionally prosecution of innocent persons when a death has erroneously been presumed to be due to murder; (d) non-recognition of hazards to public health.

Fortunately, the law in Hawaii is mandatory with respect to deaths accompanied by evidence of violence. However, it does not do anything about hazards to public health or unattended deaths.

The unexpected or sudden death of any apparently healthy person from obscure causes may be suspected to have resulted from *violent* causes. From ten per cent to fifteen per cent of such cases are found after competent investigation. Many forms of violence such as suffocation, poisoning, small penetrating wounds, etc., leave no evidence of external damage and these may be recognized only during the course of an autopsy.

Criticisms and Suggestions

The law should provide the following, if there is to be any competent official medical investigation of deaths by violent or obscure causes:

1. Definition of deaths to be investigated.
2. Designation of responsibilities and qualifications of field investigators.
3. Availability of expert assistance and central laboratory facilities.
4. Authority to investigate.
5. Mechanism for bringing facts to the attention of appropriate law enforcement agencies.

In the course of establishing a more adequate law for our community, the following items from the *Report of the Committee of the American Medical Association to Study the Relationship of Medicine and Law* should be kept in mind:

1. The name of the office under which the medical investigator operates has little or no bearing on the effectiveness with which his public duties are discharged. The law should require first, that he is competent and second, that he have both the authority and the facilities for the conduct of his investigations in the interests of public welfare.

2. The investigating officer should be a physician.

3. The law of New Jersey is quoted and endorsed, with the added suggestion that it might be improved by the incorporation of a provision requiring medico-legal investigation of persons whose bodies are to be cremated. This law is as follows: (Title 40, Chapter 21, Paragraph 66) "Duties: The Chief Medical Examiner or an Assistant Medical Examiner shall be on call at all times for the performance of his duties.

When in the county, any person shall die as the result of violence, or by casualty or suicide, or suddenly when in apparent health, or when unattended by a physician, or within twenty-four hours after admission to a hospital or institution, or in prison, or in a suspicious or unusual manner, or under any of the above circumstances in any institution located in the county, maintained in whole or in part at the expense of the state or county, the police department of the municipality in which he died, or the superintendent or medical director of the institution in which he died, or the physician called in attendance, shall immediately notify the Office of the Chief Medical Examiner of the known facts concerning the time, place, manner and circumstances of the death. Immediately upon receipt of such notification the Chief Medical Examiner, or an Assistant Medical Examiner, shall fully investigate the essential facts concerning the death. If necessary he shall go to the dead body and take charge thereof.

The Examiner shall fully investigate the death, taking the names and addresses of as many witnesses thereof as it may be practicable to obtain, and before leaving the premises shall reduce all such facts to writing. He shall file his report in the Office of the Chief Medical Examiner."

The law of New Jersey further provides in Title 40, Chapter 21, Paragraph 68: "If the cause of the death shall, by examination, be established to the satisfaction of the Medical Examiner in charge, he shall file a report thereof in the Office of the Chief Medical Examiner. If, in the opinion of such Medical Examiner, an autopsy is

necessary, it shall be performed by the Chief or an Assistant Medical Examiner."

4. In discussing upon whose shoulders rests the source of authority for the performance of a medico-legal autopsy, the Committee states "... the person best qualified to give a medical opinion as to whether or not an autopsy should be performed is the medical investigator himself. So long as he is held responsible by the law to determine the cause of death, he should have the authority to perform or have performed an autopsy when in his opinion such a procedure is indicated by the facts at hand. However, the medical investigator should be required to hold an autopsy if such an examination is requested by the public prosecutor.

The Maryland law is partially satisfactory in this respect in that it stipulates that, 'If the cause of such death shall be established beyond a reasonable doubt, such Medical Examiner shall so report and file in his office. ... If, however, in the opinion of such Medical Examiner, an autopsy is necessary, the same shall be performed by the Chief Medical Examiner, an Assistant Medical Examiner, or by such competent pathologist as may be authorized by the Chief Medical Examiner.' The law would be improved if the second sentence was rephrased to read 'If, however, in the opinion of such Medical Examiner or in the opinion of the state's attorney, an autopsy is necessary....'"

5. The finances of having a medical versus a lay investigator are discussed, and this comment is made: "The fees for lay investigators are generally lower than the fees demanded by qualified medical investigators. Most of every dollar spent to pay an unqualified investigator is wasted so far as the acquisition of reliable medical information is concerned. Such a saving cannot be truly regarded as economical even though the primary cost is less than that of employing a physician."

6. The committee reports finally on their idea of model legislation as follows:

"The kind of laws to be enacted will vary according to whether the office is (1) to be kept strictly on a county basis without being integrated with a state laboratory service, (2) to be on a county basis but integrated with a state laboratory service and (3) to be a function of state rather than county government.

Regardless of the jurisdictional status of the office (state or county), the laws should provide:

1. That the official investigator (coroner or medical examiner) shall be responsible for determining the cause of death and such medical or other information from an examination of the body that may indicate the manner of death.
2. That it shall be the duty of a magistrate of a county or municipal court to hold an inquest if in the opinion of the official investigator or the county attorney such a procedure is indicated.
3. That it be stipulated that the official investigator shall be a qualified physician and that he shall be selected and retained in office under some form of the merit system rather than by political preference.
4. That the official investigator shall be notified when in his county (or jurisdiction) any person shall die of violence or suddenly while in apparent health or from obscure causes or when unattended by a physician or in any unusual or suspicious manner, or when in his county (or jurisdiction) the body of any dead person is to be cremated. Immediately on receipt of such notification the official investigator shall go to the place where the body lies and take charge of it. He shall then and there make a written description of the body and the premises, which report, together with an opinion regarding the cause and manner of death, he shall have copied and within seven days give one copy to the county attorney.
5. That, if in the opinion of the official investigator or the county or state attorney, it is in the interest of public welfare to perform an autopsy on the body of a person whose death occurs under the purview of the law, such an examination shall be performed or caused to be performed by the official investigator.
6. That an official autopsy may be performed by the official investigator if he is a qualified pathologist and, if not, the official investigator shall engage the services of a qualified pathologist for the performance of such an autopsy.
7. That the official investigator may, within the limits of the funds supplied his office by the county budget commissioner, engage the services of a toxicologist to assist in the investigation of the cause or circumstances of any death coming within his purview.
8. That there be created (for the benefit of communities not already supplied with such facilities) a state consulting laboratory having professional and technical facilities for assisting official investigators in the conduct of pathologic and toxicologic investigations on the bodies of persons whose deaths come under the purview of the law."

Conclusion and Recommendations

The preceding report is the result of many days of investigation of the local laws and various state and other laws, and includes the knowledge gained at a formal seminar held at Harvard University. There has been considerable time, effort and study devoted to the problem. It is my sincere hope that an effort will be made, not only to alter the present law, but to completely replace it by a law embodying the proposals of the American Medical Association Committee. The law of New York City is a good one and it is suggested that our local law be copied from it, with whatever modifications are necessary to meet our local needs.

The problem should be seriously considered by a responsible committee made up of at least the following individuals:

1. The City and County Physician.
2. The City and County Sheriff-Coroner.
3. The First Deputy Sheriff-Coroner.
4. The City and County Attorney.
5. The President of the Board of Health.
6. The Attorney General of the Territory.
7. The Medical Director of one of the principal hospitals.
8. The Chief of Police of Honolulu.
9. A representative from the Hawaii Territorial Medical Association.
10. The City and County Pathologist.

Any recommendations this Committee might propose should be properly presented to the legislative body concerned for appropriate legislative action.

Young Hotel Building.

Abbreviated for publication. The full text will appear in the author's reprints.

Familial Erythroblastic Anemia (Cooley's Anemia)

Report of Possible Cases in Two Filipino Brothers

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THIS DISEASE, variously known as erythroblastic anemia, Mediterranean anemia, thalassemia major, von Jaksch' anemia, and chronic erythremia of Cooley type, is generally considered a rare disease, found only among persons of Mediterranean extraction, particularly Greeks and Italians. The United States has furnished most of the case reports, and the patients described have been of Italian, Greek, Syrian or Armenian ancestry. The literature lists two children of probable German origin, one Spanish child, one Chinese child, five children in India, two Egyptian children, and two patients from the Caspian Sea area, a 14-year-old girl and her brother, 30, described as Bucharan Jews. Commonly, several siblings in a family are affected, and the condition has been observed in identical twins. Often both parents show some significant abnormality of the blood.

Clinical Aspects

The onset of the disease is insidious. Pallor is usually noticed in the first two years of life. Not long after, the abdomen becomes prominent because of splenomegaly and, often, enlargement of the liver. There may be periodic attacks of fever. When the condition is fully developed, the clinical picture is: A child small for his age, with a large head; skin of a pale, muddy color; prominent cheek bones; bridge of the nose sunken; eyelids puffy, and there may be an epicanthal fold from which derives the designation "Mongoloid facies." Clinical jaundice is unusual. A moderate lymphadenopathy may or may not be present. The heart is often enlarged in advanced stages, and there may be edema and effusion into serous cavities. X-ray of the bones shows peculiar changes. There may be thickening of the diploë of the skull to several times the normal depth. The outer and inner tables are thin, the former sometimes being invisible, and perpendicular striations may be apparent between the tables, giving the so-called "hair-on-end" appearance. The long bones show widening of the medullary portion, decreased density of the medulla, and thinning of the cortex. The short bones, often rectangular in contour, show a characteristic mosaic pattern because of trabeculation of the medulla. These bone changes vary with the severity of the disease and advance with time. They may be present even as early as four and one-half months of age. The earliest lesions in the skull appear in the frontal bones. *It should be emphasized that the changes in the skull vary considerably even in cases of apparently equal severity, and more consistent changes have been observed in the long bones and in the metacarpals.*

The red cell count varies between one and four million, usually being between two and three million per cubic mm. The reduction in hemoglobin and in volume of packed red cells is even greater, so that the anemia is hypochromic and microcytic in type. The red cells vary from 3 to 15 micra in diameter. They contain little hemoglobin, mostly distributed at the periphery. Often cells are found with a central block of hemoglobin surrounded by a clear area (target cells). In wet preparations, the distortion of the red cells is still more apparent and there may be considerable fragmentation. Nucleated red cells are almost constantly found and sometimes are very numerous. Mostly they are typical normoblasts and microblasts, and very seldom more immature normoblasts are seen. In addition to these findings of active red-cell regeneration, many polychromatophilic cells, stippled erythrocytes, and occasional cells with Howell-Jolly bodies are found. Reticulocytes are increased, often up to 15 per cent. As tested by hypotonic saline solution, the fragility of the red cells is often decreased. Hemolysis may not be complete in 0.2 per cent saline, and sometimes even in water it may not be complete. The leucocyte count is usually between 10,000 and 25,000 per cubic mm., but in rare instances may reach 50,000 or even 100,000. On smears are usually found polymorphonuclears, few myelocytes, lymphocytes, and monocytes. Sometimes in infants there is a lymphocytosis. Platelet count is normal. There is a positive indirect Van den Bergh reaction, and an icterus index not higher than 30. The urine often contains slightly or moderately increased quantities of urobilinogen or urobilin. The feces and the bladder bile have been found to contain greatly increased amounts of coproporphyrin.

Diagnosis

Diagnosis is based on the following findings: anemia, splenomegaly, and skeletal changes. The blood shows thin, pale red cells of various shape and size; erythroblastosis, polychromatophilia, stippling, reticulocytosis, leucocytosis, slight icterus, and resistance to hemolysis by hypotonic saline solution. This combination of findings distinguishes the condition from congenital hemolytic jaundice and from sickle-cell anemia. The course in Cooley's anemia is progressive. In its classical form it is fatal, and usually it is rapid when it begins in early life. The prognosis improves with advancing age. In the more chronic cases the clinical picture is less impressive and the diagnosis may not be made.

Treatment

To date there is no treatment. Iron and liver are of no value. Transfusions are at best of temporary value. Splenectomy is generally discountenanced. Following removal of the spleen, erythroblastosis becomes more marked.

Pathology

In cases of Cooley's anemia, the main findings at autopsy are evidences of anemia and of active blood formation, both medullary and extramedullary; splenomegaly; changes in the bones; and pigmentation of various organs resembling that of hemochromatosis. The spleen is much enlarged and may show infarcts and adhesions. There are hyperplasia of the cordons and extramedullary blood formation. The Malpighian corpuscles are approximately normal or small. The bones may be greatly thickened, but there is atrophy of the bone shafts and trabeculae, and at the same time proliferation of delicate new bone. The bone marrow is hyperplastic. There may be a number of phagocytes, some containing a small amount of hemosiderin.

Pathogenesis

It is believed that this disorder represents a hereditary defect in red-cell formation, consisting, perhaps, of an inherited inability to synthesize an adequate amount of hemoglobin, and to utilize iron. The red cells are formed with an adequate or excessive membrane, but with little substance. As a result, they can absorb more fluid than normal cells without bursting. The extra thinness of the cells accounts for some of the bizarre forms which are observed, including the target cells. Other manifestations may simply represent an attempt to compensate for the faulty red-cell formation. This view would explain the marrow hyperplasia and the immature forms of the red series found in the peripheral blood. It is plausible to assume that marrow hyperplasia from early life can cause such bone changes as are found in children suffering from this disorder.

(The foregoing amounts to an abstract of Wintrobe's discussion of Thalassemia Major.)



Fig. 1. Roentgenogram of right hand of L. C., showing mosaic pattern of bone marrow.

Case Reports

L. C., a two-year-old Filipino boy, entered the Hawaiian Agricultural Company Hospital with violent abdominal cramps and vomiting. The onset had been sudden on the day of admission and about three hours after eating raw, unrefrigerated fish. The bowels had moved that morning and the parents had noticed no diarrhea and no blood in the stool. The temperature was 102.4 F. rectally. The mucous membranes were pale. There was a left subcostal scar and mother said that the spleen had been removed when the child was one year old. The liver was palpable one fingerbreath below the right costal margin. There was no lymphadenopathy. Rectal examination revealed no blood.

There being no clear-cut evidence of intestinal obstruction, the patient was treated symptomatically. The following morning all gastro-intestinal symptoms had subsided and they did not recur.

The child's weight was 23 pounds, height 32¼ inches, head circumference 19 inches, chest 20½ inches, abdomen 21 inches. His blood count was so striking that it prompted further blood studies.

Questioning of the mother revealed that the patient's four-year-old brother, R. C., had had a large spleen from early life which had been removed when he was two years old. He was brought to the hospital subsequently and there were the same blood and skeletal find-

ings, although in his case more pronounced. His measurements were as follows: Weight 33½ pounds, height 37½ inches, head circumference 20 inches, chest 21½ inches, abdomen 22½ inches. Being Filipino, both boys had Mongoloid facies.

The mother knew of no other relatives who had enlarged spleens or blood disorders. She stated that she was 26 years of age, was pure Visayan, born in Papaikou, Hawaii, and her husband, 36 years of age, was pure Ilocano, born in Dingras, Ilocos Norte, P. I. Some time later, after discussion with other members of the family, she decided that both she and her husband had some Spanish blood. It might be noted that in appearance both parents were typical Filipinos as we see them in the Hawaiian Islands. The mother showed no abnormalities of the hemogram. The father was not examined.

The following are the laboratory findings of the two brothers:

L. C.

11/22/46 RBC 2,400,000, hemoglobin 40% (Hellige), WBC 10,300 (neutrophils 65%, lymphocytes 21, eosinophils 4, juveniles 2, bands 8)
Color index 0.83
Blood platelets 196,000
Reticulocytes 6.5%
Packed cells 14
Clot retraction normal
Nucleated red cells 203 per 100 WBC
Fragility of RBC—no hemolysis at end of 2 hours
Blood Wassermann and Kahn negative

3/4/47 RBC 3,050,000, hemoglobin 46% (Hellige)
Platelets 230,000
Fragility of red cells (washed cells)—no hemolysis at end of 2 hours
Cold agglutinins negative, autoagglutinins negative
Red cells show no sickling
Moderate anisocytosis and poikilocytosis
Many target cells
Blood cholesterol 130 (normal values 140-180)
Icterus index 6; acetone method 7.5 (normal values 2-5)
Van den Bergh reaction indirect, quantitative Van den Bergh less than 0.25 mg. per cent
Urine negative for RBC and hemoglobin
Urobilinogen definitely positive

R. C.

12/12/46 RBC 1,860,000, hemoglobin 30% (Hellige)
WBC 12,600 (neutrophils 34, lymphocytes 27, eosinophils 33, monocytes 2, basophils 4, bands 4)
Color index 0.79
Blood platelets 176,000
Reticulocytes 7%
Packed cells 11
Clot retraction normal
Nucleated red cells 370 per 100 WBC
Fragility of red cells—no hemolysis at end of 2 hours
Icterus index 10, acetone method 15
Blood Wassermann and Kahn negative

3/4/47 RBC 2,620,000, hemoglobin 35% (Hellige)
Platelets 270,000
Fragility of red cells—no hemolysis at end of 2 hours (washed cells)
Cold agglutinins negative, autoagglutinins negative
Red cells show no sickling
Blood cholesterol 131
Van den Bergh reaction indirect, quantitative Van den Bergh less than 0.25 mg. per cent
Urine negative for RBC and hemoglobin
Urobilinogen definitely positive

L. C. X-ray of the skull was essentially negative, except for questionable thickening of the frontal bones and a suggestion of striation in the occipital bone. Femora showed moderate rarefaction of the distal ends. Forearms and hands showed rarefaction of the shafts of the radius and ulna and all the bones of the hands showed osteoporosis and trabeculation, mosaic in design. The metacarpals had a rectangular appearance.

Blood smears and sections of the spleens of both children were submitted to Dr. Michele Gerundo, pathologist for the Hilo Memorial Hospital, whose report is as follows:

Study of the blood smears reveals marked anisocytosis, poikilocytosis, and increased pallor of the cells. Many large cells are found, in which the hemoglobin is arranged peripherally, leaving a central clear area. These cells give the impression of being edematous. These cells show an uneven distribution of hemoglobin, which is arranged in blocks, or present a central dot of hemoglobin surrounded by a clear area (target cells). There is a large number of normoblasts, some of them having hemoglobin and a pyknotic nucleus, others showing marked polychromatophilia. So far as one can see, there are no erythroblasts or cells more immature than polychromatophilic normoblasts. Some cells contain small residual bodies, which suggest Jolly's bodies. There is no tendency toward sickling of the cells, although this finding needs to be corroborated by actual test for sickling.

Among the white cells there is a moderate number of myelocytes and metamyelocytes, but no other immature cells. The platelets do not seem to be increased in number, although a count would be indicated before final judgment is passed.

The findings on the blood smears are compatible with the clinical diagnosis of chronic erythremia, Cooley's type, called also erythroblastic anemia of von-Jaksch-Luzet-Cooley type [and familial erythroblastic anemia. —Ed.].

Note: Only one report is given for the two brothers, as the findings are similar in both. It must be noted that, at least on the smears which have been given to me for examination, R. C. shows more normoblasts and more myelocytes and metamyelocytes than L. C., as well as more evident poikilocytosis and anisocytosis.

Microscopic Description of Spleen Tissue (L. C.)

Spleen shows a rather normal architecture and structure. The corpuscles of Malpighi are scattered at rather irregular intervals and practically all contain large germinal centers. The pulp is hyperplastic; it shows no increase of the fibrous framework and contains very little blood in the sinuses and veins. Under high power the cells are of splenic origin, except in areas where there are active hematopoietic foci. The red cells in these areas tend to be elongated or to vary in shape and size. Very conspicuous are the numerous eosinophils found in these areas as well as among the splenic cells and along the trabeculae. Large amount of hematic pigment is present, free as well as engulfed in the splenic cells.

Anatomical Diagnosis: Spleen: Hyperplasia with Extramedullary Hematopoietic Foci.

Microscopic Description of Spleen Tissue (R. C.)

Spleen resembles the other, except that there are few Malpighian corpuscles present, and the fibrous framework is increased with corresponding diminution of cellular elements. The hematopoietic foci are also reduced in number and the eosinophils are not found in any outstanding number.

Discussion

I believe that most of the criteria for the diagnosis of Cooley's anemia are present. The skull changes are not so marked as in many descriptions in the literature. Yet, if one waited for every single classical criterion in any syndrome to be manifest one would make few definitive diagnoses. No doubt the insistence on the prerequisite of Mediterranean extraction in patients with this

disease has prevented its recognition in other racial groups. So far as we know, there have been no reports of Cooley's anemia among Filipinos, whether of pure or mixed origin. Therefore, these two cases add to the statistical incidence of this disease. It is absurd in science to ask that any one disease must be considered as occurring in only one racial group. Cooley's anemia will probably follow the same course as many other so-called racial diseases. As study progresses, it will be found that it is perhaps widespread without any respect or consideration for any special ethnic group.

Conclusion

Despite the questionable skull findings, I still believe the other clinical and laboratory findings are sufficient to establish the diagnosis of familial erythroblastic anemia (Cooley).

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Discussion

DR. M. GERUNDO:—Of all the names given to this disease the most absurd is certainly "thalassemia." Its components *thalassa,* sea, and *emia,* blood, would imply that these patients have perhaps sea water in their blood. Now if we look at the matter closely, our body fluids, and that includes blood, have the same composition as sea water; and I wonder whether anyone could survive without sea salts in the blood.

The name of Mediterranean anemia is also undesirable. The term "Mediterranean" may refer to the locality or to a race. In the first instance, there is no evidence that the climate or other particular factors present along the shores of the Mediterranean Sea may have any influence upon the development of the disease. Indeed, studies on this disease were made on patients who had lived all their life in this country. Similar terms, like Malta fever and Rocky Mountain spotted fever, are now rejected by the majority of authors. In the second instance, there is no such thing as a Mediterranean race. To be sure there are peoples and nations in the area, but not a race to be identified with the sea. It is enough to glance at some history books to find out how many different stocks of people are present there. In science, we cannot adopt the racial factor—if really there are races in the human race—as the most important criterion for a disease. As pointed out in Downey's *Handbook of Hematology,* patients who had all the characteristics of this so-called "Mediterranean Anemia" were not included in the group, because they were of a different racial extraction. It seems to me that the clause of racial limitation is carried to an excessive degree.

The third term, "erythroblastic anemia," is unsuitable because it takes into account only a secondary peripheral finding and ignores the pathogenesis of the disease. The Italian hematologist Di Guglielmo has pointed out that no one would call a lymphoid or myeloid leukemia "lymphoblastosis" or "myeloblastosis." He has classified Cooley's anemia in the group of chronic erythremia or chronic erythremic myelosis. This term is the most appropriate because it takes into account the central lesion, it follows the classical hematological terminology and it is consonant with the efforts of modern hematology to recognize disease of the hematopoietic organs and not of the peripheral blood.

The two patients presented by the author have all the features of chronic erythremia (Cooley's type) as you see from the slides of blood and bones. The Mongoloid face is not a necessary sign. It has been pointed out that many Mexican children in good health have facies suggestive of the changes of this disease because of their broad features. On the other hand, a person with an elongated type of framework, as it often occurs in Nordic countries, requires extensive bone changes to reproduce the Mongoloid facies.

Incidence of Oxyuriasis Among A Group of School Children in Honolulu

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OXYURIASIS, i.e., infection with pinworms, Enterobius vermicularis (Fig. 1), appears to be one of the most common parasitic diseases of man. A report of extensive surveys conducted by the National Institute of Health in the District of Columbia indicated that 35.4 per cent of the general population of that area harbored these parasites.[1] The report also pointed out that data from four European countries (Germany, Finland, Sweden and Soviet Russia) show an average of 46 per cent infection among several thousand individuals examined, the positive findings ranging from 3 to 93 per cent. Pinworm infection appears to surmount all sanitary barriers, being found in all classes of people irrespective of their economic levels. According to the findings of the National Institute of Health, oxyuriasis is more prevalent among children of school age (6 to 18 years) than adults. This is probably the result of improper sanitary habits and close associations at school and play permitting greater risk of infection.

This paper presents the results of a brief survey made to determine the incidence of pinworm infection among a group of young children attending one of the schools in Honolulu. This study was initiated because the attention of the writers was drawn to several cases of oxyuriasis among local children and because there appeared to be a need for determining the incidence of the infection in this community. As far as is known to the writers, no similar study had previously been conducted in Hawaii.



Fig. 1. Pinworms, Enterobius vermicularis: (a) Adult males and females; (b) Eggs.

In testing the children for pinworms the "NIH swab" (Fig. 2) was used; this apparatus was originally described by Hall[2] and has been found very

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[1] Cram, E. B., Jones, M. F., Reardon, L., and Nolan, M. O.: Studies on Oxyuriasis: VI. The Incidence of Oxyuriasis in 1,272 Persons in Washington, D. C. With Notes on Diagnosis, Pub. Health Rep. 52: 1480 (Oct. 22) 1937.

[2] Hall, M. C.: Studies on Oxyuriasis: I. Types of Anal Swabs and Scrapers, with a Description of an Improved Type of Swab, Am. J. Trop. Med. 17: 445 (May) 1937.

useful for collecting pinworm eggs from the perianal region. The method adopted in securing the material for examination consisted of submitting to the parents, through the school authorities, one "NIH swab" with a note describing the method and time of making the swab. The note suggested that the perianal region of the child be swabbed the first thing in the morning upon arising, and that the specimen be submitted to the laboratory for examination. In making the examination all the children found positive on the first swab were not re-examined, but those found negative were tested a second time.

The children examined in this study totaled 138 and ranged from 2½ to 7 years of age. Of these, 71 were of Caucasian and 67 of Oriental ancestry. There were 65 boys and 73 girls.

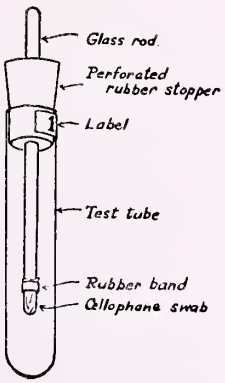


Fig. 2. The NIH swab (after Hall, 1937).

Results and Discussion

Of the 138 children examined 43, or 31.1 per cent, showed pinworms. Since only one additional examination was made on the children found negative after the first swab, there is a possibility that a few that harbored pinworms were missed. According to Sawitz,[3] one examination is estimated to reveal about 70 per cent of the positives and 2 examinations about 80 per cent of the positives. His report indicated that 7 examinations are necessary to insure finding most (96 per cent) of the positive cases. Accordingly therefore, the corrected percentage of positives in the present study would theoretically be about 38 per cent.

In this survey the incidence of infection among the 2 sexes was about equal. Of the 43 positive cases, 22 were boys and 21 girls. This equal distribution of infection was similarly indicated by the National Institute of Health survey (Cram *et al*[1]) in the District of Columbia in which, of the 627 persons examined, 36.3 per cent of the positives were males and 34.2 per cent were females.

As to the incidence of infection with reference to age, the number of children examined for each age group is too small to permit definite correlations; however, the percentage differences found are indicated in Table 1. In this regard, Cram and co-workers in the District of Columbia found 36 per cent of children up to 18 years of age, as compared with 33 per cent of adults, positive for pinworms. Of the children, those of school age (6 to 18) showed higher incidence of infection (50 per cent) than those of the pre-school age (20 per cent). It was suggested by those investigators that the school environment was probably responsible for the increased incidence of infection in the children of school age.

It is of interest to note, in the present study, the apparent greater percentage of pinworm infection among children of Caucasian ancestry than among those of Oriental ancestry. Of the 71 Caucasians examined, 29, or 40 per cent, were found positive, and of 67 Orientals examined, 14, or 21 per cent, were positive. Whether or not similar results would be obtained if a larger sample of the population were examined remains to be determined.

Although the present study involved too few children to allow inferences regarding the entire child population of Honolulu, the sample is large enough to indicate that oxyuriasis appears to be common in the area and to constitute a problem of public health interest. Much could probably be done towards its control through education and proper treatment.

TABLE 1.—*Age distribution of 138 children examined for pinworms, and incidence of infection among each age group.*

Age	2	3	4	5	6	7
Number examined	10	17	32	35	37	7
Number positive	4	3	9	7	16	4
Percentage positive	40.0	17.6	28.1	20.0	43.2	57.1

Summary

An examination of a group of 138 children, aged 2½ to 7, attending school (nursery to first grade) in Honolulu, showed 31.1 per cent to be positive for pinworms on two swab examinations. Calculated on the basis of seven swabs, believed required to reveal most cases, the incidence of infection would probably be about 38 per cent. The number of positive cases was found to be equal among the two sexes. Children of Caucasian ancestry appeared to show a higher incidence of infection (40 per cent) than those of Oriental ancestry (21 per cent). The results indicate that oxyuriasis is probably common in this community and represents one of the problems of public health importance.

The University of Hawaii.

[3] Sawitz, W., Odom, V. L. and Lincicome, D. R.: The Diagnosis of Oxyuriasis. Comparative Efficiency of the NIH Swab Examination and Stool Examination by Brine and Zinc Sulfate Flotation for *Enterobius vermicularis* Infection, Pub. Health Rep. 54: 1148 (June 30) 1939.

Why A Lumbar Puncture?

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THERE IS probably no diagnostic procedure in the field of medicine which is more severely abused, misused and improperly applied than the lumbar puncture. One gets the impression that the average medical man derives a certain amount of sadistic satisfaction out of obtaining a four inch long needle and pushing it up to the hilt in the patient's back. He then gleefully collects a tube full of clear or bloody, more frequently the latter, fluid, without considering the specific indications and contraindications for the procedure, or the amount of valuable diagnostic information he can obtain.

For the past several years, almost every patient I have been called to see for neurological consultation has already had one or more lumbar punctures. When the referring physician is asked why the lumbar puncture was done the answer is almost always, "to find out what is wrong with the patient." It seems as though he almost expects the menehunes to jump through the needle and shout in a loud voice the neurological diagnosis. When the laboratory report is returned and the diagnosis is not found on the laboratory sheet, the disappointment and bewilderment of the doctor is evidenced by a repetition of the procedure, one, two, or even three times.

It is the purpose of this communication to point out, emphasize and re-emphasize the fact that diagnosis of [most] diseases of the nervous system cannot be made with the lumbar puncture needle. In this age of modern medicine, with dozens of diagnostic laboratory procedures to make our clinical diagnosis for us, the modern physician drifts further and further from good old fashioned physical diagnosis. An accurate diagnosis of a disease of the central nervous system can only be made by a careful, intelligent neurological examination and interpretation and the evaluation of symptoms indicating dysfunction of certain parts of the nervous system. No laboratory procedure can replace this.

There are a few neurological diseases in which the laboratory findings of the spinal fluid *may help* to verify the clinical diagnosis. But these findings in themselves are not diagnostic. Actually, there are only *three* pathological conditions of the central nervous system which can be diagnosed by lumbar puncture alone. They are: 1. Central nervous system syphilis; 2. Spinal meningitis; 3. Subarachnoid hemorrhage. Each of these diseases can readily be recognized by their clinical signs, with, perhaps, the exception of certain milder forms of central nervous system syphilis [asymptomatic neurosyphilis—ED.]. So actually, if a physician is honest with himself, he will never do a lumbar puncture except as an adjunct to one of these three diseases which has already been strongly suspected clinically.

1. On all patients with positive blood Wasserman or a clinical picture suggesting central nervous system syphilis, the spinal fluid findings will either verify or rule out luetic infection of the central nervous system.

2. The clinical picture of acute meningitis is easily recognized. The patient is acutely ill with high fever, rapid pulse, stiff neck, and high white blood count; he may be in coma. In such cases, purulent spinal fluid obtained by lumbar puncture will verify not only the diagnosis but the bacterial etiology of the infection.

3. Subarachnoid hemorrhage, either spontaneous or traumatic, can be recognized clinically by low grade fever, stiff neck, severe headache, and particularly a slow pulse. In the presence of these clinical findings, bloody spinal fluid can be expected and lumbar puncture is indicated not only for diagnosis but for treatment in relieving the patient's headaches by removing a small quantity of the bloody fluid.

In all other diseases of the nervous system, the spinal fluid findings are not only not diagnostic in themselves, but may be actually misleading. For example, patients with a clinical picture of severe encephalitis may have perfectly normal spinal fluid because the infection is deep in the white matter of the brain and nowhere near the meninges to produce irritation and an increase in the spinal fluid cell count. A high total protein content of the spinal fluid may suggest the presence of a tumor obstructing the spinal canal; however, large tumors may be present in the spinal canal without completely obstructing it and a normal spinal fluid protein content may be misleading.

There are specific indications and contraindications for doing a lumbar puncture, as a diagnostic procedure. There are really more contraindica-

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tions for a lumbar puncture than indications. These should all be carefully considered by the physician before a lumbar puncture is contemplated.

Indications for Lumbar Puncture

1. On all patients with positive blood Wasserman or if the clinical picture suggests a central nervous system syphilis.
2. Acute infections of the central nervous system, where the clinical picture suggests a myelitis (polio), meningitis, or encephalitis.
3. Suspected spinal cord tumors or injuries to the spinal cord (to determine subarachnoid hemorrhage or spinal fluid block) and herniated intervertebral discs where a high spinal fluid protein may be helpful in the diagnosis.
4. On all epileptics, primarily for the Wassermann reaction.
5. Head injuries. *The only indication* for a lumbar puncture following a head injury is evidence of a subarachnoid hemorrhage or meningitis characterized by: 1) Headache or stupor; 2) Rising or continued elevation of temperature; 3) Persistent slow pulse; 4) Stiff neck.

Contraindications to Lumbar Puncture

1. Always the first and most important, *never* do a lumbar puncture without first examining the eye grounds for evidence of intracranial pressure. Even if the optic nerves are only blurred and the vessels tortuous, a lumbar puncture is contraindicated. Other clinical evidences of intracranial pressure likewise are contraindications, such as stuporousness, coma, slow pulse, frequent yawning, etc. If the patient has increased intracranial pressure and one punches a hole through the dura of the caudal sac, there is a rapid loss of spinal fluid through this hole into the surrounding tissues of the spine and over a period of a few minutes to a few hours, considerable spinal fluid may be lost resulting in a negative pressure in the spinal canal. The positive pressure in the cranial vault gradually forces the tonsils of the cerebellum through the foramen magnum, compressing the medulla oblongata and the patient will die of respiratory paralysis from medullary compression.
2. Never do a lumbar puncture in an attempt to relieve intracranial pressure.
3. Never do a lumbar puncture in a head injury within the first twenty-four to forty-eight hours.
4. Never do a lumbar puncture in skull fractures with bleeding from the ears or nose. Removal of the fluid from below will cause negative intracranial pressure which may aspirate infected material through the fracture line into the intracranial cavity and meningitis will result.
5. Never do a lumbar puncture on a patient who has had a cerebral vascular accident within the first forty-eight hours. A relief of intracranial pressure by removal of fluid may increase the hemorrhage or start one which had already stopped.
6. Never do a lumbar puncture in your office. Do not consider the procedure as a minor, insignificant one. Because of the serious complications which can result, the patient should be in the hospital where he may be kept flat in bed and watched for twelve hours after the procedure.

Post Spinal Puncture Headaches

When I am informed by my colleagues that the severe throbbing headache which occasionally follows a lumbar puncture is psychogenic I am convinced they know nothing of the hydrodynamics of the cerebrospinal fluid. I have been told by sincere and conscientious doctors that if the patient is told to get up immediately after a lumbar puncture and go to a show or a dance or some other entertainment and forget about it, there will be 60 per cent less patients with post puncture headaches than among those kept in bed after the procedure. This may be a good sales talk to anyone but a neurosurgeon!

In operating upon lumbar intervertebral discs I have had an opportunity to expose the dural sac over 400 times. If the dura is accidentally nicked or if a needle is intentionally inserted through it (to remove pantopaque oil) a continual stream of spinal fluid will pour from the small perforation and flood the operative field for the remainder of the operation. Of course, the larger the needle used and the shorter its bevel (blunt end), the larger the hole it makes in the dura and the greater the loss of fluid. The smaller the needle and sharper the point, the less fluid lost.

It is surprising to see the quantity of fluid which escapes when even the finest needle is used. It is a wonder to me there aren't more post-puncture headaches.

The normal intrathecal presure of the cerebrospinal fluid in the horizontal position is a positive pressure of 150 to 180 mm. of water. A lot of fluid can be pushed through the hole you make in the dura with your spinal needle with this amount of pressure behind it, even with the patient lying down. If you weren't lucky enough to "get in" the first time, you may have poked 3 or 4 more holes through which fluid could leak. Now, if you let your patient stand up, go home on a bus, or go to a show (!!), in the upright position, the intrathecal pressure in the lower lumbar sac is between 500 and 600 mm. of water. How much

fluid do you think is going to escape into the tissues of his back? Then when he comes back with a headache, and a backache, it's psychogenic!!?

No! the post puncture headache is due to loss of large quantities of cerebrospinal fluid, escaping through the needle hole in the dural sac, resulting in an increased negative intracranial presure with the head in the upright position. The headache is immediately relieved by changing the negative to a positive pressure—by placing the patient in the horizontal position or with his head down.

The headache can be prevented by these simple rules:

1) Use a small needle (#20 or less) with a long bevel (sharp point).
2) Before removing the needle withdraw it about 1 cm. or until the fluid flow stops, indicating the needle to be outside the dural sac; inject 1 cc of air through the needle; then withdraw. This bubble of extradural air equalizes the intradural pressure and may stop the flow of fluid.
3) Keep the patient horizontal or head down for twelve hours: it takes at least this long for nature to patch the hole in the dura.

In the past ten years, I have probably done over 2,000 lumbar punctures in my neurological practice. Following the above rules, I can only recall three patients who developed post puncture headache of any significance requiring prolonged bed rest.

Spinal Fluid Pressure and Its Interpretation

When a diagnostic lumbar puncture is indicated one should seek to obtain as much diagnostic information from it as possible. One of the most important findings to record is the spinal fluid pressure. So frequently, I will find the laboratory report of a spinal fluid specimen and find no notes in the doctor's handwriting as to his findings: intracranial pressure, hydrodynamics and color of the fluid, etc. When I ask if he measured the pressure, he answers, "No, I didn't have a manometer," or "I couldn't find a manometer," or "I didn't need to measure it, the fluid dropped out under 'normal' pressure"!!!—then I know he either doesn't know what he is doing or why he is doing it, or he is a sadist.

One should never even start a lumbar puncture unless there is a sterile water manometer available. If you do, you are going to miss one of your most valuable diagnostic findings. It is impossible within a range of 100 mm. of water to guess the spinal fluid pressure by the rate at which the fluid drops from the needle.

The normal initial pressure with the patient in a horizontal position is 150 to 180 mm. of water. In the sitting position the fluid will rise in the manometer to the cisterna magna, i.e., at a level with the top of the ears; above this the pressure is considered to be increased. Any spinal fluid pressure above 200 mm. of water (horizontal) or above the top of the patient's head (upright) should be considered as pathological—any increased intraspinal fluid pressure should be viewed with alarm and should demand immediate action. This increase in pressure indicates the presence of a space taking lesion in the closed cavity of the cranium. Whether it be a tumor, an abscess, a hematoma or edema, the *impairment* of the cerebral function by the pressure may proceed rapidly to *cessation* of function if the pressure is not relieved.

A child was recently seen at 8:30 a.m. in consultation, twenty-four hours following a head injury. During this time, she had become increasingly more listless. The pulse was slow. At 10 a.m. a lumbar puncture was done and an initial pressure of 350 mm. of water found. This finding was either ignored or its significance not appreciated, because no report of it was made and nothing was done. The child died at 1:00 p.m. Autopsy disclosed a large extradural hematoma beneath a linear fracture. The proper evaluation of this one spinal fluid finding with immediate surgical intervention and removal of the hematoma would have saved the child's life.

Summary and Conclusions

And so the next time you contemplate doing a diagnostic lumbar puncture, hesitate a few minutes and ask yourself the following questions:

1. Why am I doing this?
2. What do I expect to learn?
3. Am I trying to *find* a diagnosis or verify one?
4. Will the procedure do the patient more harm than good?
5. Are there any contraindications to the procedure in this case?

If you carefully consider and answer each of these questions before you get the spinal needle in your hand, I am sure there will be a great many less lumbar punctures done. After the proper lumbar puncture procedures have been performed, including measurements of initial pressure, hydrodynamics by the Queckenstedt test, and an inspection of the fluid obtained for laboratory study, the doctor should then write down, evaluate and ponder over *his* findings (not those of the laboratory). If they show gross deviation from normal and he is unable to evaluate the pathological significance, he should not hesitate to immediately call in some one who can.

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Effect of Penicillin Sodium on Coliform Bacilli and Proteus in Vitro

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THIS STUDY was undertaken with two purposes in mind: to observe the effect of penicillin sodium on the morphology of Escherichia coli. Aerobacter aerogenes and Proteus vulgaris, and to find out whether the drug would induce physiological changes in these organisms which would be reflected in certain identifying tests commonly employed in clinical laboratories. Further investigation of morphological changes was suggested by the observations of Alture-Werber et al.[1] and Kojima and Heimbrock[2] on the effect of penicillin against E. coli and by Fennel's[3] work with A. aerogenes. Prot. vulgaris was included as a test organism since it is commonly encountered in association with organisms of the coliform group in routine laboratory examinations of feces, urine, and other body fluids.

Any physiological effects of the drug which would alter the well known cultural reactions of these organisms would have more than theoretical interest. On several occasions Gram-negative rods resembling coliform bacilli have been isolated from feces and urine cultures at one of the hospital laboratories* in Honolulu but when tested have failed to give the characteristic reactions of E. coli, A. aerogenes, Prot. vulgaris, or any other commonly occurring organism. Since all of the patients were receiving penicillin treatment it was thought that these atypical reactions might be due to the effect of penicillin. Some study of this possibility seemed desirable.

Methods

Stock laboratory strains of organisms which exhibited typical morphology, Gram reaction and cultural characteristics were chosen for the study. In the case of E. coli and A. aerogenes, the "Imvic" tests (indole production, methyl red test, Voges-Proskauer reaction, and citrate utilization) were made. In addition the growth of E. coli on eosin methylene blue agar was noted. In all respects the results were characteristic for each organism. With Prot. vulgaris preliminary observations included indole production, V.-P. reaction, citrate utilization, and gelatin liquefaction as well as growth on E.M.B. medium, blood agar, and Kligler's iron agar. Typical results were obtained in each case. The test strains of E. coli and Prot. vulgaris were actively motile.

Prior to exposure to penicillin the test organisms were transferred from stock cultures into 5 ml. of brain broth and incubated for 24 hours, then transferred again into 5 ml. of brain broth to make certain that the organisms were in an optimal metabolic condition. All incubation was carried out at 37.5± 0.5 °C. The second subcultures in brain broth were incubated for 12 hours in the case of E. coli and A. aerogenes and for 6 hours in the case of Proteus, and from them a standard (4 mm.) loopful was diluted and plated to ascertain the size of the inoculum to be employed. Plate estimates made after 24 hours gave the following results: E. coli approximately 5,500,000 organisms per loop; A. aerogenes, 7,000,000; and Prot. vulgaris, 4,000,000. At the same time one loopful was transferred from the 12-hour or 6-hour cultures into various dilutions of penicillin. To avoid dilution of nutrient material or any alteration in pH value of the final test media 100,000 Oxford units were dissolved in 20 ml. of brain broth, the same medium used for all test cultures containing penicillin. This stock solution was then diluted with brain broth to achieve final concentrations ranging from 12.5 to 4,200 units per ml.

Smears from each tube of test medium were made after 3, 4, 6, 12, 24, and 48 hours in the incubator, stained by Gram's method, and examined.

After 12 and 24 hours' growth in the presence of penicillin subcultures were made into suitable media to see whether the cultural characteristics previously noted had been altered.

Results

In Table 1 it will be noted that penicillin induced marked morphological changes in the

From the Department of Bacteriology, University of Hawaii. The authors wish to thank Dr. M. L. Tainter of the Winthrop Chemical Company for the penicillin sodium used in this work.
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[3] Fennel, E.: Penicillin: Its Effect on Bacterial Morphology, HAWAII MED. JOUR. 5: 259 (May-June) 1946.

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organisms. The three principal deviations were: the formation of long filaments at low concentrations of penicillin and at early growth stages, especially in the case of Proteus; frequent appearance of swellings on the rods and filaments; and segmentation with development of coccal forms at higher concentrations of penicillin (not shown in table). The formation of swellings appeared to be a very transitory process, being limited to relatively narrow ranges of drug concentration and the earlier growth stages. All of the morphological changes noted were temporary and the organisms reverted to their characteristic short rod forms by the end of 48 hours exposure to penicillin.

The different susceptibilities of the test organisms to growth inhibition were very striking. E. coli was the most sensitive in this regard. It failed to grow in a penicillin concentration of 200 units per ml. even after 48 hours, yet showed the least change in morphology as far as filaments and swellings were concerned. The next most susceptible organism was A. aerogenes which grew in a penicillin concentration of 450 units per ml. at the end of 24-hour incubation but failed to grow in a concentration of 2,500 units in 48 hours. The most resistant of the group was Proteus, which gave clearly visible growth even in a concentration of 4,200 units per ml. by the end of 12 hours. But although Proteus was the most resistant of the three to growth inhibition, the morphological changes, especially filament formation, were more marked in this organism than in either E. coli or A. aerogenes. There was no appreciable effect on motility of Proteus or E. coli. Even the long filaments and swollen forms were actively motile.

As can be seen in Table 2 there were no physiological changes which could be demonstrated by the criteria employed. Even those subcultures made from tubes containing mostly morphological variants failed to show any variation from the cultural reactions which are typical for the species.

In the case of Prot. vulgaris a second series of tests was conducted in which various concentrations of penicillin were added to tubes containing 5 ml. of a culture already 24 hours old. Since the drug had no demonstrable effect at any concentration the detailed data on this series are omitted.

Discussion

The abnormal morphological changes noted seemed to be due to interference with the growth process since they were noted largely in the first few hours of exposure to penicillin. If this is true it would be expected that no morphological changes would occur when various concentrations

TABLE 1.—*Morphology of Organisms Growing for Different Periods at 37.5±0.5° C. in Brain Broth Containing Various Concentrations of Penicillin Sodium*

Penicillin Concentration in Oxford Units/ml.

Hours of Incubation	Organism	12.5 Rod	12.5 Filament	12.5 Swelling	25 Rod	25 Filament	25 Swelling	50 Rod	50 Filament	50 Swelling	75 Rod	75 Filament	75 Swelling	100 Rod	100 Filament	100 Swelling	200 Rod	200 Filament	200 Swelling	450 Rod	450 Filament	450 Swelling	2500 Rod	2500 Filament	2500 Swelling	4200 Rod	4200 Filament	4200 Swelling	0 (Control) Rod	0 (Control) Filament	0 (Control) Swelling
3	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	+++	++	-	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	+++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-
4	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	++	++	+	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-
6	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	++	++	+	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-
12	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	++	++	+	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-
24	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	++	++	+	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-
48	E. coli	++	+	+	-	+	++	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	←	N.V.G.	→	++++	-	-
	A. aer.	++	++	+	-	++	+++	-	+++	-	-	++++	-	+	+++	-	+	++	+	-	-	-	-	-	-	-	-	-	++++	-	-
	Prot.	++	++	-	-	++	-	-	++	-	-	+++	-	-	++	-	-	+	-	-	-	-	-	-	-	-	-	-	++++	-	-

Legend: ++++, Exclusive; +++, Predominant; ++, Frequent; +, Infrequent; -, Absent; N.V.G., no visible growth.

TABLE 2.---*Cultural Reactions of Organisms Following Incubation at 37.5±0.5° C. for 12 and 24 Hours in Brain Broth Containing Penicillin Sodium*

Test	Organism	Hours Exposure to Penicillin Before Testing	Penicillin Concentration in Oxford Units/ml. 12.5	25	50	75	100	200	450	2500	4200	Control (0)
Indole Production	E. coli	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	A. aer.	12	←	—	—	Negative		—	—	→		—
		24	←	—	—	Negative		—	—	→		—
	Prot.	12	←	—	—	Negative		—	—	—	→	—
		24	←	—	—	Negative		—	—	—	→	—
Methyl Red Test	E. coli	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	A. aer.	12	←	—	—	Negative		—	—	→		—
		24	←	—	—	Negative		—	—	→		—
	Prot.	12										
		24										
Voges-Proskauer Reaction	E. coli	12	←	—	—	Negative		—	—	→		—
		24	←	—	—	Negative		—	—	→		—
	A. aer.	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	Prot.	12	←	—	—	Negative		—	—	—	→	—
		24	←	—	—	Negative		—	—	—	→	—
Citrate Utilization	E. coli	12	←	—	—	Negative		—	—	→		—
		24	←	—	—	Negative		—	—	→		—
	A. aer.	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	Prot.	12	←	—	—	Positive		—	—	—	→	+
		24	←	—	—	Positive		—	—	—	→	+
Metallic Sheen on EMB Agar	E. coli	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	A. aer.	12										
		24										
	Prot.	12										
		24										
Gelatin Liquefaction	E. coli	12										
		24										
	A. aer.	12										
		24										
	Prot.	12	←	—	—	Positive		—	—	—	→	+
		24	←	—	—	Positive		—	—	—	→	+
Motility	E. coli	12	←	—	—	Positive		—	—	→		+
		24	←	—	—	Positive		—	—	→		+
	A. aer.	12										
		24										
	Prot.	12	←	—	—	Positive		—	—	—	→	+
		24	←	—	—	Positive		—	—	—	→	+

of penicillin were added to 24 hour cultures of Proteus. This view is in accord with that of Dubos,[4] Mellon,[5] Fisher[6] and others.

From the results obtained when the Imvic and other criteria were applied to organisms previously exposed to penicillin *in vitro* it would seem that the atypical gram-negative rods encountered in routine examinations of feces and urine specimens are not penicillin-altered forms of E. coli, A. aerogenes, or Proteus but perhaps are members of the paracolon group which has been comprehensively described by Schaub.[7] However, this interpretation must be tentative for two reasons. In the first place, exposure of organisms to penicillin in the culture tube is by no means the same as chemotherapy *in vivo*. Secondly, here the bacteria were under the influence of penicillin for only a few hours whereas in a patient under treatment this period would ordinarily extend over days or weeks. Schwarz and Lazarus[8] have shown very recently that another antibiotic, streptomycin, can cause microbic dissociation *in vivo* which is manifested by changes in colonial morphology and virulence and which is also temporary.

Summary

1. Marked morphological changes were induced in the three test organisms. The variant structures were filaments, swellings, and coccal forms.
2. These changes were temporary, each organism reverting to its characteristic short rod form within 48 hours.
3. There was a definite difference in the susceptibilities of the organisms to growth inhibition by penicillin sodium, E. coli being the most susceptible, A. aerogenes next, and Prot. vulgaris the least affected.
4. Penicillin sodium had no demonstrable effect on the motility of Prot. vulgaris or E. coli.
5. There were no changes in cultural characteristics which could be demonstrated by the identifying tests commonly employed in the clinical laboratory.
6. The drug had no effect when added to 24-hour cultures of Proteus.
7. The significance of these observations is discussed.

[4] Dubos, R. J.: Antimicrobial Agents of Biologic Origin, J.A.M.A. 124: 633 (March 4) 1944.

[5] Mellon, R. R.: Studies in Microbe Heredity. I. Observations on a Primitive Form of Sexuality (Zygospore Formation) in the Colon-typoid Group, J. Bact. 10: 481 (Sept.) 1925.

[6] Fisher, A. M.: A Study on the Mechanism of Action of Penicillin as Shown by Its Effect on Bacterial Morphology, J. Bact. 52: 539 (Nov.) 1946.

[7] Schaub, I. G.: Paracolon Bacilli and Their Relation to Urinary Tract Infections, J. Lab. & Clin. Med. 31: 958 (Sept.) 1946.

[8] Schwarz, L. H., and Lazarus, J. A.: Streptomycin in the Treatment of Pyocyaneus Infections of the Urinary Tract, J. Bact. 53: 128 (Jan.) 1947.

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MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

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[EDITORIALS]

THE NEW NURSE PRACTICE ACT*

September 28, 1947

To the Editor:

I had planned for some time to write you concerning the Territorial Nurses' Practice Act (Act 103 of the 1945 session of the legislature, amending Chapter 52 of the Revised Laws of Hawaii 1945), but deferred doing so in hopes that the amendments by the recent legislative session would correct some of the law's inadequacies. This hope has failed; the revised act (Act 240 of the 1947 session) has not changed a single point of the items to be discussed.

It seems astonishing that everything which I have so far seen in print regarding this act has been favorable. Can it be that those concerned have not thought the matter through to its logical conclusions? Personally, I consider the law unworkable and injurious. My reasons follow:

The law's most enthusiastic proponents admit that it is not workable at present, but claim that it will be when schools for practical nurses are functioning and a few classes have been graduated. Let us look ahead, then, to that happy time and forecast the situation:

There will be, as today, too few graduate nurses. More power to them!

There will be, perhaps, a few more practical nurses, some trained in the new schools, more the remnant of the present unregenerate day of licensing on a basis of experience. There will not, of course, be enough to fill all needs.

Hospitals, as today, will not have enough nurses to care for all patients. If they employ untrained nurses, or nurses' aids, or orderlies, to perform simple nursing functions, the hospital will not be violating the law, but the employees will be. To take extreme but accurate cases: If a regularly employed hospital orderly, not licensed as a practical nurse, hands a urinal to a patient (a service which surely requires expert training and skill!) he will be subject to a fine of not more than five hundred dollars. If a doctor's office secretary, not a licensed nurse, puts a thermometer in a patient's mouth and reads the result, she will be subject to the same fine. If an indigent neighbor is willing to help a sick person for a slight fee, she may feed him his regular food; but if the doctor orders a diet, the neighbor violates the law by feeding it to the patient. I believe that such absurdities make the present law indefensible. And if you question my statements, I refer you to the amended law, sections 2770 and 2780, and to the Attorney General's decision as recorded in the July-August number of the HAWAII MEDICAL JOURNAL, page 456.

There is no doubt in my mind that Kalaupapa Settlement could not continue to function under a strict interpretation of the act, without serious loss of efficiency; and I strongly suspect that the same situation would apply in many plantation hospitals. Making exceptions here and exemptions there is not an adequate solution, nor would a declaration of perpetual emergency be anything but an admission of the law's inadequacy. The law is basically at fault, and should be changed. I have a suggestion; perhaps there is a better:

Rewrite the law for the next legislature. Keep the special schools and licensure for practical nurses; make the proposition as attractive as possible, and get as many as will to take this special training. But do not close the door on those who cannot, or will not, take a course of a year or more to learn how to put a spoon in a patient's mouth. Instead, establish a third, untrained group (call them what you will) who may practice legally but on a lower rating (including salaries) than the trained and licensed practical nurse.

Meanwhile, let the board declare an emergency (caused by the lack of skill shown in writing the present law) until the legislature meets again, so as to exempt from penalty those who perform "for pay" simple functions which do not require specialized training, and which constitute professional nursing only by virtue of a legal definition.

If I am wrong, please show me. If I am right, something should be done. The nurses are apparently unwilling to take action. Let's have free discussion of this important matter. Let's counteract the nurses' "Isn't it wonderful?" propaganda by publicity, so that an enlightened professional and public opinion may ask the next legislature for a good and workable law.

NORMAN R. SLOAN, M.D.

* "The above expressed opinions are those of the writer, and do not represent the official policy of any government department."

To the Editor:

The Board for the Licensing of Nurses is happy to have the opportunity to reply to Dr. Sloan's letter as printed in this issue of the JOURNAL, in order to clarify the issues it raises.

Dr. Sloan states that the law for the licensing of practical nurses is not workable because there will not be enough licensed and professional nurses to fill the needs of the Territory. Reports on December 11, 1947 from hospital administrators in Honolulu, officials of the Territorial Hospital Association, the Nursing Service Bureau and from the Territorial Board of Health indicate that few if any positions for either professional or practical nurses remain unfilled except those requiring special preparation for teaching or supervision. There are 1,742 professional nurses and 772 practical nurses now licensed in the Territory. It is expected that 75 students will be graduated from the new course of training for practical nurses by December, 1948. Plans to make use of facilities on other major islands and for conducting evening and part-time courses for employed practical nurses will increase the output of persons fully qualified for licensing. It is expected that replacement needs will be met from this group.

A report on page 649 of the November 8th issue of the *Journal of the American Medical Association* states that nursing needs are increasing by being met on the mainland.

In answer to Dr. Sloan's reference to "extreme and accurate cases" we quote Section 2779 of the Nurse Practice Act (1947). "The provisions of this chapter shall not be construed as prohibiting gratuitous nursing by friends or members of the family, or as prohibiting the incidental care of the sick by domestic servants or persons primarily employed as housekeepers, as long as such persons do not practice nursing within the meaning of this chapter, or as prohibiting nursing assistance in the case of emergency. . . ." This section seems to us to make clear that auxiliary workers can perform occasional simple duties such as "handing a urinal to a patient."

It is recognized that a hospital for the care of Hansen's disease [leprosy—ED.], such as Kalaupapa Settlement, may present exceptional circumstances. Nevertheless we see no reason why the patients employed as practical nurses cannot conform to the requirements of the law. It is suggested that a few such patients be selected for training at the Settlement in the arts of practical nursing and that there be a redistribution in assignments of other workers to include non-nursing duties only. The patients chosen and trained by the professional nurses to perform duties as practical nurses could then be licensed without exception to the law.

In order not to disrupt present hospital service or to deprive persons now employed as practical nurses of their livelihood, we have found it necessary to license practical nurses by waiver at present under the emergency clause in the law. When it is to the best interests of the community, we will cease to use the emergency clause.

The Board agrees with Dr. Sloan that a group of auxiliary workers such as porters and maids, is essential to the efficient operation of a hospital. Such workers have been widely used in hospitals for many years. The law makes no requirement for the licensing of such workers who perform non-nursing duties. Therefore, the Territorial Board for the Licensing of Nurses sees no value in rewriting the law.

We call attention to the fact that many other groups of persons following trades or professions directly or indirectly affecting the health and safety of the public are licensed for the express purpose of protecting the public from untrained persons and imposters, namely, physicians, dentists, barbers, cosmeticians, plumbers, engineers, masseurs, undertakers, physical therapists, occupational therapists, optometrists, dental hygienists, medical technicians, electricians, professional nurses and others.

The aim of the Nurses Association, Territory of Hawaii and the Board for the Licensing of Nurses in promoting this Act and carrying out its intent is to provide a better quality of nursing care for the patient and more valuable help for the physician.

We shall be glad for suggestions which bring us closer to this aim.

BOARD FOR THE LICENSING OF NURSES
TERRITORY OF HAWAII
JOHN WM. DEVEREUX, M.D.
Secretary

LOWERING THE COST OF HOSPITAL CARE

New York's Montefiore Hospital is trying, according to the December 9 issue of *Look* magazine, a new experiment to reduce the cost of chronic illness: home extension service as a substitute for prolonged hospital care. Headed by one physician, Dr. Martin Cherkasky, who supervises (with one full-time and one part-time assistant) the care of 45 chronically ill patients, the service is known as Home Care. Hospital beds are provided when needed; nursing service is made available to whatever extent is necesary; x-rays and electrocardiographs are obtained with portable equipment; members of the family are instructed in simple nursing procedures; paracenteses and infusions are given when required; and so on. It is said that patients seem to get well faster in the relatively agreeable surroundings of their own homes than they might have been expected to in the hospital.

The plan is not necessarily applicable to any and all communities, but it certainly appears to be a step in the direction of lowering the costs of hospitalization—which, as Mr. Clemens said of weather, gets talked about oftener than it gets anything done about itself.

MEMORIAL TO DR. JAMES R. JUDD

To the County Medical Society of Honolulu:

We, the nurses of "The Old Guard," 1917-1927, do offer to the Medical Society as our memorial gift to the late Dr. James R. Judd, a 10 year subscription to *Archives of Surgery* and 4 years to *Surgical Clinics of North America.* Trusting that these Journals will be acceptable and of much interest to you all,

MARY E. MERRILL, R.N.
for our group.

Through the HAWAII MEDICAL JOURNAL I would like to express my deep appreciation and grateful thanks to all the nurses of "The Old Guard," 1917-1927, who responded to the plea that we make some fitting memorial to the late Dr. James R. Judd. Many of us had worked for him, admired his surgical ability, or had an affectionate regard for him.

Through the helpfulness and kindly suggestions of Dr. Rogers Hill, President of the County Medical Society, and Dr. R. N. Perlstein, acting for Dr. Hastings Walker, Chairman of the Honolulu County Medical Library Committee, we have accepted the suggestion that our memorial gift to the Library shall be a 10 year subscription to *Archives of Surgery* and 4 years of *Surgical Clinics of North America,* these two journals costing us $152.00 of our subscribed $162.00, the balance going to the Social Service of Queen's Hospital, which was a pet interest of Dr. Judd's.

At first thought you may be disappointed in the choice of Journals, feeling it will not be a perpetual memorial; but the Journals, I am informed, are bound and filed away and are used frequently by the Doctors for references. These when bound will be marked with the Library book plate which will bear some notification that it is our memorial gift; also as each number is received it will be stamped in a way to mark it as our gift.

Again thanking you heartily for your cooperation, I am

Sincerely yours,
MARY E. MERRILL, R.N.

The list of donors follows:

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Dear Miss Merrill:

The thanks of the Honolulu County Medical Society and the Honolulu County Medical Library are extended herewith to you and your fellow donors for the thoughtful and generous memorial gift of the medical journal subscriptions, honoring the memory of Dr. James R. Judd.

I venture to predict that your fears about the gift's impermanence will prove groundless, for when these subscriptions expire, in four and again in ten years, it will be strange indeed if another group of Dr. Judd's friends cannot be found to renew them—and still another when they again expire. I suspect you have founded a permanent memorial to your old friend and ours. We all thank you.

HARRY L. ARNOLD, JR., M.D.
Secretary
Honolulu County Medical Society

COMMUNICABLE DISEASE CONTROL TERRITORY OF HAWAII

The control of communicable diseases has long been recognized as the first requisite for safeguarding and promoting a high standard of community health. The monograph entitled "Communicable Disease Control," recently published by the Postwar Health Planning Committee of the Chamber of Commerce of Honolulu, represents a progressive step in this direction and a new approach in the presentation of such information. The study is divided into four sections, including leprosy, tuberculosis, venereal diseases, and other communicable diseases. Material is presented in terms of legal status, covering control measures; existing facilities; personnel; and current control programs. Both immediate and long-range objectives are recommended under the above-named categories. This procedure makes it possible to scrutinize quickly the present situation of the different phases of the program. Every outline is supplemented by a narrative report which elaborates more in detail on the needs as set forth for strengthening existing control machinery.

Each report has been prepared under the direction of a chairman and a special subcommittee. With the exception of two lay individuals, members of the subcommittees were physicians interested in these special problems. Dr. Samuel D. Allison functioned as the overall chairman of the study groups. Dr. Harry L. Arnold, Jr., served as chairman for the section on leprosy; Dr. Hastings H. Walker acted in a similar capacity for tuberculosis; Dr. Allston Gourdin directed the venereal diseases group; and Dr. James Enright, the committee on other communicable diseases. Copies of these studies may be obtained from the office of the Public Health Committee, Chamber of Commerce of Honolulu.

LUMBAR PUNCTURES: MORE, OR FEWER? AND WHERE?

The neurosurgeon, judging from the opinions expressed elsewhere in this issue by Dr. Cloward, thinks far too many lumbar punctures are being done. No doubt he is correct. The dermatologist, and the psychiatrist, on the other hand—conditioned as they are by their common concern with general paresis—are chronically unhappy because too *few* lumbar punctures are being done. No doubt they, too, are correct. What it might be boiled down to is this: that the decision as to whether to do a lumbar puncture or not to do it is often based on unsound reasons.

As Dr. Cloward properly emphasizes, a lumbar puncture may be (1) completely uninformative (or even misleading), or (2) actually dangerous. Like many other laboratory tests, it should be ordered as part of a definite plan rather than just haphazardly; and it should never be done unless the results might affect the management of the case.

When I was an interne, lumbar punctures were regarded as an in-patient procedure in the Dermatology Department and as an out-patient procedure in the Neurology Department. Now Dr. Cloward urges hospitalization for lumbar puncture, while I do them in the office; he says post-puncture headaches are more frequent if patients remain ambulatory following the tap, while I have rarely encountered any such reaction since I stopped, three years ago, requiring any rest period at all following the procedure.

Perhaps we could compromise. Perhaps spinal taps could be done in the hospital except where the diagnosis of asymptomatic neurosyphilis is concerned. For there is no way to make this diagnosis except by examination of the cerebrospinal fluid; and it is hard enough to accomplish this now, without requiring the time and expense of the hospitalization.

HARRY L. ARNOLD, JR., M.D.

DELAY IN DIAGNOSIS OF CANCER

The public's increased cancer-consciousness is bringing patients to doctors earlier than formerly. But are doctors contributing their share toward prevention of delay in the diagnosis of cancer?

Cancer-consciousness in the public is being stimulated by a widespread educational program conducted through radio, newspapers, and magazines. The October, 1947, issue of the *Women's Home Companion,* for example, contains a featured article by Clive Howard entitled "Cancer of the Womb," in which the Papanicolaou technique for early diagnosis of uterine cancer with vaginal smears is described and highly praised. This sort of thing will create a demand for such services with which the profession should try to keep pace.

Leach and Robbins of Memorial Hospital in New York reported in the J.A.M.A. last September the results of a study designed to show (1) whether the responsibility for delay in diagnosis of cancer belonged more to the physicians or more to the patients, and (2) whether any improvement had occurred since a similar study was made by Pack and Gallo in 1938. Their conclusion was that, while both patients and physicians were culpable in varying degree, the blame in 1946 fell *oftener on the physician* and *less often on the patient* than in 1938. Inadequate examination by the physician originally consulted was an outstanding source of error and delay. They urged, as remedial measures, the following: (1) *consultation* if no diagnosis is made after one month's observation; (2) *prompt treatment* or proper advice as soon as a diagnosis is possible; (3) *consultation* if the response to treatment seems inadequate.

In summary, then, physicians should ask themselves whether they are doing all they can to prevent delay in diagnosis of cancer. Thoroughly adequate initial examinations, consultations as indicated, and attentive reception of such new aids as Papanicolaou's vaginal smear technique seem in general to point the way toward a better performance in the early diagnosis of cancer. The vaginal smear should be used as an aid and not as a substitute for pelvic examination, biopsy, and dilatation and curettage in the diagnosis of uterine cancer. Cancer can only be cured if it can be found —and found early!

"SEMINAR" ON RENAL PHYSIOLOGY

Sharp and Dohme's quarterly *Seminar* for August, 1947, contains sixteen pages on renal anatomy and physiology that surpass for clarity, conciseness, and beauty of illustrations, anything we have seen published on this or any other medical subject. Nine clear schematic diagrams in color illustrate the physiology of urinary secretion in detail, with specific reference to glucose and penicillin and to fluid balance and renal circulation. The normal kidney and its injected vascular supply are shown in color on one page, and there are two more pages of color photomicrographs showing the microscopic structure of the organ.

If you didn't see this issue it is worth your trouble to send for it: the address is Philadelphia 1, Pennsylvania. This sort of thing is advertising at its best.

CASE REPORTS

UTEROTUBAL IMPLANTATION: REPORT OF A CASE FOLLOWED BY SPONTANEOUS DELIVERY AT TERM

ALVIN V. MAJOSKA, M.D.

The following case is considered worthy of report because of the apparent paucity of succesful cases to be found in the literature and the general pessimistic attitude associated with plastic procedures on the oviducts for the purpose of overcoming sterility due to tubal occlusion.

Case Report

Mrs. K. L., a 33 year old married Caucasian civilian secretary, was first seen in my office on November 16, 1945, because of low backache, sterility and other unrelated symptoms. The backache and the other symptoms responded rapidly to symptomatic treatment. The patient had been previously married and had been pregnant once. That pregnancy had ended in a spontaneous abortion at four months. At the time seen by me, the patient had been remarried for five years and had not been able to conceive during that period of time. Past medical history revealed that "an ovary, appendix and part of another ovary" were removed in 1940. There was a two stage thyroidectomy performed in 1942 and 1943, followed by oral administration of thyroid for some time thereafter. The patient denied any venereal diseases. Menstrual history: Menarche at twelve. Catamenia always regular with a twenty-eight day cycle while on the mainland and a twenty-one day cycle after arriving in the Territory. No leukorrhea, dysmenorrhea, menorrhagia or metrorrhagia. Associated with the shortened menstrual cycle there was easy fatiguability and rapid weight gain. There were no notable familial diseases and the patient reported that she was one of a family of seven children.

Physical examination revealed a well developed and well nourished, intelligent Caucasian woman who was alert, cooperative and in no obvious distress. The pertinent findings for the purposes of this paper consisted of a slight retroversion of the uterus with the fundus pulled over toward the right. The cervix of the uterus was firm, smooth and non-patulous. The uterus was of normal size and contour and was slightly fixed in position. The adnexae were not palpable because of a slight panniculus. The thyroid gland was not palpable and there was no evidence of thyroid dysfunction.

Laboratory studies revealed a blood count and urinalysis within normal limits. A chest x-ray failed to reveal any pathological findings. The husband's spermatic fluid was examined from a condom specimen on November 17, 1945 and was found to contain numerous well formed, active spermatozoa with no aberrant forms.

A Rubin insufflation and a dilatation and curettage were performed on December 4, 1945. Patency of the oviducts could not be demonstrated even after prolonged pressure of 200 mm. of mercury. The curettings revealed normal endometrial tissue in the follicular phase.

Despite my pessimism, the patient insisted that nothing be left undone in an effort to render her fecund, and a plastic restoration of tubal patency was attempted on January 16, 1946. The technique employed embodied the principles of Holden and Sovak[1] as modified by Spangler,[2] Green-Armytage[3] and the particular situation as it existed in this case. Numerous dense fibrous adhesions were found between the uterus and the right oviduct. It was found that the left ovary, the left oviduct and the appendix had been previously surgically removed. The remaining ovary (right) was cystic and had a thickened capsule. The fimbriated ostium of the right oviduct was free of adhesions and the oviduct was found to be patent as far as the right cornu of the uterus by retrograde insufflation with air. The adhesions about the oviduct were carefully divided and all minor bleeding points were controlled by crushing with a fine hemostat, rather than by ligation. The oviduct was then divided near the cornu by means of a scalpel and then split longitudinally. The anterior surface of the body of the uterus was incised down to the uterine cavity in the midline near the fundus and the split oviduct was carefully anchored to the inner wall of the uterus as in the technique of Holden and Sovak. The incision in the uterus was then closed by a double layer of plain interrupted catgut sutures. There was no retrograde insufflation of the oviduct performed at the completion of the operation as it was felt that the procedure had no therapeutic indication and that unnecessary manipulation was unwarranted. Delicate handling of tissue was stressed throughout the entire operation and the oviduct was manipulated, as far as possible, by grasping only the serosa.

The postoperative course was smooth, complicated only by a slight cough and a slight amount of vaginal bleeding. Penicillin and cevitamic acid were the only specifics given during the patient's hospital stay and she was discharged on the seventh postoperative day with a well healed wound.

Five months after the operation the patient left the Territory for the mainland. The only other point of note in her postoperative course is that she suffered with a severe dysmenorrhea at each catamenia.

The patient was seen by Dr. Hans Seligman of Groton, New York on September 18, 1946 and I am indebted to him for the following report. The last regular catamenia the patient had was on August 3, 1946 and she had a slightly bloody vaginal discharge when first seen by Dr. Hans Seligman. The bleeding stopped within two days on a regimen of Progesterone, bed rest and vitamin E. On October 19, 1946, the uterus was found to be of the size of a three months pregnancy, the right adnexae were very tender and the uterus was pulled over to the right. On November 17, 1946, the

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[1] Holden, F. C. and Sovak, F. W.: Reconstruction of the Oviducts: An Improved Technique with Report of Cases, Am. J. Obst. & Gynec. 24: 684 (Nov.) 1932.

[2] Spangler, C. M.: Operations for Sterility, S. Clin. North America 25: 1345 (Dec.) 1945.

[3] Green-Armytage, V. B.: Tubo-uterine Implantation for Sterility, Brit. M. J. 2: 6 (July 3) 1937.

deviation could no longer be demonstrated and the uterus was now of the size of a four months pregnancy. The prenatal course was marked by hyperemesis, anorexia, attacks of sharp right lower quadrant abdominal pain and a hyperchromic, macrocytic anemia. All of these responded well to treatment. The patient went into spontaneous labor and delivered a normal female infant of seven pounds and fifteen ounces in ROA after a seventeen and a half hour labor. There was considerable uterine bleeding immediately after the delivery but this stopped rapidly after the administration of ergot and Pitocin.

Comment

J. P. Greenhill[4] reports that the first case of pregnancy following a tubal implantation was reported by T. Watkins in 1896. This pregnancy terminated as a miscarriage. The first full term pregnancy producing a viable infant was reported in 1922 by Thomas S. Cullen.[5] This particular case had been previously pregnant in 1921 (after the reconstruction had been performed) but that pregnancy terminated as an abortion in the seventh month of pregnancy. Since that report, plastic procedures with varying success have been reported by others, among whom are Sovak,[6] Holden,[7] Solomons[8] and Norris.[9] Isolated statistics on implantation techniques are difficult to find, as most papers report the statistics for plastic procedures in general. Most papers are generally pessimistic regarding reconstruction operations, but at least one author, Greenhill,[10] reported a more optimistic outlook in a paper written after a previous highly pessimistic one. His revised opinion was based on the report of Lastra and Jacob who had four pregnancies result after ten tubal implantations. Of these four, three had full term pregnancies. Siegler[11] reported that in twenty-three cases of tubal occlusion undergoing various plastic procedures, four conceived and delivered at term. Of the remaining nineteen, tubal patency was established in fourteen. Von Graff[12] reported a series of seventy cases of uterotubal implantation in which twenty-six subsequently became pregnant. Twenty-three of these went to term. Norris[9] reported a series of eight cases of uterotubal implantation of which four subsequently became pregnant. Three of these delivered spontaneously at term and the other was delivered by elective Caesarian section. Most other writers report only the demonstration of tubal patency after the procedure and make no mention of the number of live births resulting therefrom.

Summary

A case of sterility due to an occluded oviduct treated successfully by uterotubal implantation is presented.

It is suggested that uterotubal insufflation postoperatively may be contraindicated.

In my opinion, plastic reconstruction of the oviducts is indicated in certain selected cases and a more optimistic outlook seems justified in the light of more recent reports.

[4] Greenhill, J. P.: Evaluation of Salpingostomy and Tubal Implantation for the Treatment of Sterility, Am. J. Obst. & Gynec. 33: 39 (Jan.) 1937.

[5] Cullen, T. S.: A Normal Pregnancy Following Insertion of the Outer Half of a Fallopian Tube into the Uterine Cornu, Bull. Johns Hopkins Hosp. 33: 344 (Sept.) 1922.

[6] Sovak, F. W.: Operative Treatment of Sterility, Am. J. Surg. 30: 406 (Sept.) 1936.

[7] Holden, F. C.: Pregnancy and Delivery at Term Following Reconstruction of Oviducts, Am. J. Obst. & Gynec. 32: 346 (Aug.) 1936.

[8] Solomons, B.: Sterility, with Special Reference to Surgical Possibilities, Surg., Gynec. & Obst. 60: 352 (Feb.) 1935.

[9] Norris, C. C.: The Surgical Treatment of Sterility Caused by Occlusion of the Fallopian Tubes, Surg., Gynec. & Obst. 58: 741 (April) 1934.

[10] Greenhill, J. P., in Yearbook of Obstetrics and Gynecology, Yearbook Publishers, Chicago, 1942, p. 376.

[11] Siegler, S. L.: Fertility in Women, J. B. Lippincott, 1944, p. 401.

[12] von Graff, E.: Operative Treatment of Female Sterility (Tubal Implantation), J. Iowa M. Soc. 26: 31 (Jan.) 1936.

[13] Polowe, D.: A New Technique for Reconstruction of the Oviducts, Am. J. Surg. 68: 208 (May) 1945.

[14] Curtis, A. M.: A Textbook of Gynecology, ed. 3, Philadelphia, W. B. Saunders, 1938, p. 421.

[15] Sovak, F. W.: Tubal Pregnancy in a Case of Bilateral Tubal Implantation, Am. J. Obst. & Gynec. 32: 344 (Aug.) 1936.

POST-GRADUATE LECTURES

VI. RECENT ADVANCES IN THE DIAGNOSIS AND TREATMENT OF THYROID DISORDERS*

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Although more is known concerning the thyroid gland than any other endocrine organ, our knowledge still advances at a rapid pace. The important differentiation between exophthalmic goiter and toxic adenoma has been accepted by a majority of students of the disease; recent years have seen the development of surgery of the thyroid gland almost to the state of perfection; the danger of development of thyroid malignancy, especially in nontoxic thyroid adenomas, has been emphasized; the mechanism of thyroid heart disease is more clearly understood; it has been demonstrated that the basal metabolic rate and blood cholesterol estimations are reliable diagnostic tests in thyroid disorders; the isolation, determination of the chemical structure, and simplification of the synthesis of thyroxine has been accomplished; experience has shown that thiouracil and propylthiouracil are antithyroid drugs of great promise. Certain aspects of these topics and some remarks concerning myxedema have been selected for discussion in this article.

The Diagnosis of Toxic Goiter

The diagnosis of toxic goiter is not difficult in patients who have a sizable enlargement of the gland, exophthalmos, and other obvious evidences of the disease. It is the atypical cases, in which the so-called classical signs are minimal or absent, which are overlooked. Without entering into the differential diagnosis of toxic thyroid conditions, I should like to emphasize the following five helpful points in regard to the diagnosis. Patients with toxic goiter usually present all, or four out of five, of the following diagnostic criteria:

1. A loss of 10 to 20 pounds or more of body weight despite a good appetite.
2. Complaints of continuous excessive warmth and sweating.
3. A tachycardia, even at rest, of 90 per minute or greater.
4. A basal metabolic rate of plus 20 or higher.
5. A blood cholesterol of less than 220 milligrams per 100 cc. of blood.

Of considerable importance also is the mental status of patients with toxic thyroid disease; they often show characteristic changes, as follows: They are over-alert, hyperactive, emotionally unstable, and show increased mental irritability. Unlike the psychoneurotic, they usually underestimate their symptoms, and resent being placed at rest in bed.

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Parts 6 and 7, concluding the series of lectures. A limited number of reprints of the entire series is available on application to the editorial office of the JOURNAL.—ED.

Differentiation Between Exophthalmic (Diffuse Toxic) Goiter and Toxic Adenoma

It is important in all instances to differentiate between the two types of toxic goiter, and this can almost always be accomplished because there are usually well marked differences. It is known that toxic adenoma rarely occurs before the age of 30 years; that commonly there is a history of a goiter, often of considerable size, for a period of 12 to 14 years or even longer; exophthalmos is lacking, and the gland is generally large and nodular. In addition, there are some important characteristics which should always be kept in mind, as follows: Patients with toxic adenoma are more likely to be cured by subtotal thyroidectomy, as there is rarely a recurrence of the condition following this operation; they do not react as favorably to the administration of iodine; malignancy may develop in such types of goiter; thyroid crises or "storms" rarely if ever occur; thyroid heart disease is observed more commonly in this type of goiter; and pressure symptoms are more frequently encountered.

Antithyroid Drugs

Based largely on the early work of Astwood, certain antithyroid drugs were introduced into clinical medicine and have now had several years of clinical trial with most promising results. One of the most potent was thiouracil, which is related to urea but it is a closed ring with six carbon atoms with a C = O linkage which appears to be important in drugs which have this action.

It was soon discovered in humans that this preparation had the following action: In patients with thyrotoxicosis, it prevents the formation of thyroxin in the thyroid gland, apparently by blocking the addition of iodine to the tyrosine molecule which is the normal process leading to the formation of thyroxine. When this occurs, the thyroxine which is already present in the thyroid gland is gradually utilized during a period of several weeks. Following the depletion of the thyroxine content of the gland, then the level of this hormone in the circulating blood falls below normal limits. This diminution serves as a stimulus to the anterior pituitary gland to produce more thyrotropic hormone and this in turn acts on the thyroid gland to produce hyperplasia and increased vascularity. Although the gland thus stimulated appears to be hyperplastic, and, therefore, one which is hyperactive in producing the thyroid hormone, such increased functional activity does not actually occur. This is because the building materials, the tyrosine and iodine, from which the thyroxine is synthesized, are blocked in such a way that the iodine cannot be added to the tyrosine to form thyroxine.

The Action of Thiouracil

In association with Dr. Wm. H. Beierwaltes, Assistant Professor of Medicine at the University of Michigan, I have administered thiouracil to over 120 patients with toxic goiter. The usual initial dose was 0.2 gram three

times daily, which was reduced to 0.4 gram daily when the basal metabolic rate reached +15. When it fell to 0 or less, the dose was reduced to 0.2 gram daily and continued thereafter in most patients for a period of 6 months. We have arrived at these conclusions cencerning the action of this drug:

1. **Within 3 to 5 weeks the basal metabolic rate in almost all patients becomes greatly diminished or reaches normal limits.**

In many instances it is below 0. If the patient had a large gland, which probably means that a considerable amount of thyroxine was stored in it, a longer time was required for the rate to reach normal. The same was true if the patient had received iodine immediately prior to the thiouracil therapy. In general, it may be said that within 2 months, in almost all cases, the basal metabolic rate was well within normal limits, the patient had gained weight, the pulse rate was normal, and material improvement was undoubtedly present. In my opinion the results attained by thiouracil are much more satisfactory than those following the use of iodine.

If the drug is given in doses of 0.2 gram daily, after the basal metabolic rate had reached normal, for a period of at least 6 months, it is good insurance that the patient will remain in a satisfactory state of remission for a long period. In the few patients in whom there was a recurrence, evidence of this appeared within the two months following the discontinuance of the drug. The possibility that thiouracil or related compounds may be used as a medical form of treatment of toxic goiter, especially of the exophthalmic type, must be given consideration but remains for further observation to demonstrate conclusively.

2. **Thiouracil is not an innocuous drug.**

Its untoward actions must be watched. There are only two ill effects of a serious nature, the most important being *agranulocytosis* and the other a *febrile reaction.* The latter is of minor importance as compared to the agranulocytosis, and may be in many instances controlled by discounting the drug and resuming it within a few days. Usually the patient is then able to tolerate it without difficulty. If repeated febrile reactions occur, however, it may be necessary to abandon its use; but this has never been necessary in my experience.

The possibility that a patient who is receiving thiouracil may develop agranulocytosis should always be kept in mind. Such a serious complication occurred 6 times in 120 patients in our group. In each instance, the patient recovered when the drug was discontinued and large doses of penicillin were administered. *In all patients, after 10 days to 2 weeks, the drug was resumed in the same dosage, and with one exception it was well tolerated* for a long interval without the slightest evidence of an untoward effect. One patient who refused to consider a thyroidectomy was again given the drug in the usual dose and within a few weeks had a second attack of agranulocytosis, from which she recovered. Following this she took our advice and had the operation with satisfactory results.

Every patient who receives thiouracil should be warned that it may cause chills, fever, a skin rash, and sore throat. If any of these symptoms should appear, *all medication should be discontinued at once,* and a white blood cell count should be done. When this is low, penicillin therapy is at once indicated. If these measures are carried out promptly there is no reason why a patient with agranulocytosis should succumb.

The Use of Propylthiouracil

More recently propylthiouracil, which is closely related to thiouracil, has been introduced as an improved antithyroid agent. This is supposed to be as potent and less toxic. In treating about 50 patients with this drug, it is my conclusion that the original proposed dosage of 50 milligrams three times daily is effective, but less so than thiouracil in doses of 200 milligrams three times daily. In no instance, however, have I observed any ill effects from the drug. Others who have studied its action have the same opinion when it is given in the advised dose of 150 milligrams daily. Evidence is accumulating, however, that the dose should be increased to 300 milligrams daily in order to produce results which are comparable to those produced by thiouracil. I doubt if agranulocytosis will be caused even in an occasional patient with this dosage, but further observation is necessary in order to determine this point. Patients who are receiving the drug should be warned concerning its use, in a way similar to those who are given thiouracil.

The Modern Treatment of Toxic Goiter

I still believe that in experienced hands the most effective form of treatment for all forms of toxic goiter is subtotal thyroidectomy. It should be remembered, however, that surgery does not produce uniformly good results. There are occasional recurrences, isolated instances of post-operative tetany, post-operative paralysis of the vocal cords, myxedema, and a small percentage of fatalities. Probably all patients with *toxic adenomas* should be treated by *surgery* because (1) the goiter may be unsightly, (2) it may cause pressure, (3) the operation will almost surely relieve the toxic symptoms and (4) the possibility of malignancy will be averted.

On the other hand, there should be a continuation of studies to determine if *propylthiouracil* will eventually be the most satisfactory method of treating *exophthalmic goiter.* In any event, the drug is an ideal one for the purpose of preparing all patients for a subtotal thyroidectomy, and in my opinion should be employed in all instances. It has the drawback that several weeks are necessary in order to prepare such patients but the operative risk is appreciably lessened, and the period of convalescence is undoubtedly shortened. It should be emphasized, morover, that never, in my opinion, is the operation for toxic goiter an emergency; and furthermore, one of the most reliable criteria of operability of such a patient is the state of general nutrition.

The justifiable criticism of the surgeon that goiter patients who have been prepared for operation with antithyroid drugs have an excessively vascular gland which bleeds easily may be circumvented by the administration of Lugol's solution, 5 minims three times daily for a period of two weeks prior to the operation.

Cancer of the Thyroid Gland

Cancer of the thyroid gland probably occurs more frequently than has been previously supposed, but in my opinion it is not as common as some recent statistics would lead us to believe. It is generally accepted that such malignancy arises always in an abnormal thyroid gland, and that the condition is of greatest incidence in a goitrous geographic region. The preceding lesion is most frequently an adenoma. The figures relating to the

incidence of cancer of the thyroid as stated by Cole and Slaughter (*J.A.M.A.* 127:883, 1945) are indeed disquieting. In a pathological study of 523 goiters, including those which were toxic, nontoxic, benign and clinically malignant, 7.2 per cent were found to be malignant. In 330 patients with the clinical diagnosis of toxic adenoma, 1.2 per cent were found to be neoplastic. It was in the nontoxic adenoma group, however, that the amazing incidence of cancer was reported: 17.2 per cent. Even more startling than this was the finding that in 92 patients with solitary nontoxic adenomas, 24 per cent were found to be malignant. In 100 multinodular, nontoxic adenomas the incidence was 11 per cent. To one who lives in a goiterous region and sees many nontoxic adenomas, especially small solitary nodules, it is indeed alarming to note such a figure. If it were true that such a remarkable per cent of patients with solitary nontoxic adenomas developed malignancy, there should be no hesitation insisting that all such growths be removed. There are two considerations, however, which make one hesitate to consider such a policy. One is that there would hardly be space in the hospitals to accommodate all such patients; and second, there is a reasonable doubt concerning the degree of accuracy with which malignancy of the thyroid can be recognized even by the most experienced pathologists. In support of this view I need only cite the statement from the sixth edition of Howard T. Karsner's *Human Pathology*, on page 693, in which he says, "Furthermore, the anatomic character of the thyroid is such that considerable difficulty is often encountered in diagnosing tumors [neoplasms—ED.]" And again on page 695 it is stated by this same author, "Any attempt at classification of carcinoma of the thyroid encounters many difficulties because of the wide variation in microscopic picture, and also because of the fact that tumors [neoplasms—ED.] microscopically which gave no indication of malignancy may metastasize widely."

The presence of a nodule in the thyroid gland nevertheless always raises the question in my mind as to the desirability of its removal. After having seen such patients in some instances develop a cancer of the thyroid, it is a spur to eliminate all possibilities of such a tragic occurrence. At present it is my custom to advise that all nodules in the thyroid gland whose diameter is greater than that of a silver half dollar be removed. This is on the grounds that such a nodule is likely to be visible and, to a certain extent, disfiguring; that it may become toxic; that ultimately pressure symptoms may develop; and finally that there is a possibility that malignant change may occur.

It is of some interest to note that *toxic adenomas*, according to Cole and Slaughter, become malignant in only slightly over 1 per cent of the cases. Furthermore, *never* in my experience have I seen a patient with a diffuse hyperplastic goiter (exophthalmic goiter) develop a neoplasm of the gland.

Some Important Points in Regard to Myxedema

It is not my intention to enter into a full discussion of this disease but I do desire to emphasize a few points in regard to its diagnosis and treatment. In the first place there is not a single important condition, for which a potent form of therapy is available, which is more frequently overlooked than myxedema. In the past 30 years, few patients with this disorder have entered the hospital with the correct diagnosis. There are two reasons for this: first, the physician does not keep the disease in mind; second, the patient is often so retarded mentally as a consequence of his disease, that it is utterly impossible to obtain an accurate history.

Diagnosis of Myxedema

The diagnosis is not difficult. Remember that it is not such a rare condition. Then look at the patient. If he has myxedema there will be *puffiness of the eyes*, especially of the upper lids; a *slow, low-pitched, husky voice* and difficulty in pronouncing words distinctly; the hands will be *cold and dry, not cold and moist* as seen in psychoneurotic patients, or hot and moist as in patients with thyrotoxicosis. The first question that you should ask such a subject is, "Do you suffer from the cold weather, and is there an absence of normal sweating?" If the answer to this is positive, then it is possible that the patient has myxedema and this should be confirmed by a basal metabolic rate, which is usually below —30, and a blood cholesterol, which is almost always above 300 milligrams per 100 cc. of blood, and often as high as 500 milligrams per cent.

I do not wish to imply that the disease is always recognized so easily. In some patients, even with careful laboratory studies, the diagnosis may still be in doubt. In such patients an additional therapeutic test should be performed. It is based on the knowledge that patients with myxedema are sensitive to the action of desiccated thyroid whereas a person with the normal thyroid function may require as much as 8 to 10 grains daily in order to produce even mild effects. The test in a patient suspected of having myxedema is carried out as follows: The patient's basal metabolic rate, blood cholesterol and body weight under standard conditions are determined. Desiccated thyroid is then administered in a dosage of 0.032 grams (½ grain), four times daily, for a period of two weeks. At the end of this time, the basal metabolic rate, blood cholesterol and body weight are again determined and the subjective status of the patient evaluated. If true myxedema is present, the basal metabolic rate will be increased, the blood cholesterol will be reduced, there will be a loss in body weight of several pounds, and the patient will testify that there has been convincing subjective improvement. *All criteria* will certify as to improvement; whereas if the patient does not have myxedema the evidence of an effect will be nil, or certainly not so uniform.

Treatment of Myxedema

My experience in treating myxedema in the past has made it clear that two mistakes commonly occur. They are: first, *the dose of desiccated thyroid is usually too large;* and second, *most patients relapse* because they are not kept under supervision for a sufficient period of time. I would recommend that the standard dose of desiccated thyroid for patients with myxedema should be *0.032 gram (½ grain)*, four times daily, until the basal metabolic rate is between —15 and —10. Then an average *maintenance dose of 0.065 gram (1 grain) should be given daily* thereafter in order to keep the basal metabolic rate at about that level, and the blood cholesterol at 220 to 250 milligrams per cent. In patients over 60 years, and in those with an associated anemia, or those with evidence of myocardial weakness, the dose should be less, varying from 0.032 (½ grain) three times daily, to as small as 0.032 gram (½ grain) daily from the very beginning of treatment. Naturally the physician is anxious to demonstrate to the patient the beneficial effects of the drug and hence there is a great temptation to give large doses in order to produce a prompt and

decisive response. In my own experience I have observed two patients with myxedema succumb to myocardial infarction, and another develop congestive failure, during the preliminary stages of treatment with doses which we would now recognize as excessive.

Almost all patients with the disease relapse. This is easily understood because it is difficult for patients to continue treatment when they are free from symptoms. In order to prevent this, the physician should emphasize that *it will be necessary for the patient to take this medication continuously for the remainder of his life.* Also, all patients with the disease should remain under the care of a physician indefinitely. After being first placed on a maintenance dose, they should return every three weeks for clinical evaluation, basal metabolic rate and blood cholesterol determinations, and eventually after they are well adjusted on their maintenance dose, every three months, and finally every six months thereafter.

VII. OBESITY

In my opinion, every practitioner should have a clear conception of the real dangers associated with the obese state, the mechanism of its production, and the simplest, safest, most comfortable and efficient method of causing the desired reduction in body weight. Even a superfiicial examination of life insurance statistics indicates that obesity is a real hazard as far as health and longevity are concerned. For example, if a person exceeds his ideal weight by fifty pounds at the age of forty-five years, the added risk is comparable to that imposed by valvular heart disease in an individual of the same age. These statistics show further that ten pounds overweight between the ages of forty-five and forty-nine years is associated with an 8 per cent higher death rate; twenty pounds overweight causes an 18 per cent added risk, and fifty pounds one of 56 per cent. The excess mortality in corpulent persons is due chiefly to organic heart disease, hypertension, apoplexy and diabetes. Furthermore, the obese are unable to withstand surgical procedures, childbirth or acute infections such as pneumonia, as well as persons of the same age and normal weight.

A few years ago Newburgh and Conn demonstrated that many obese individuals of middle age or older who have been thought to have diabetes mellitus, will no longer have a glycosuria when their weight has been reduced to normal by an anti-obesity diet. Furthermore, they will not thereafter have sugar in the urine, regardless of the diet consumed, provided they do not gain weight. That they have a glycosuria associated with obesity, rather than true diabetes, is demonstrated by the fact that their ability to burn sugar is unimpaired. Such persons when obese, however, have a glucose tolerance curve which is characteristic of diabetes and often a marked glycosuria. They do not develop acidosis nor are the classical symptoms of diabetes usually present, such as polydypsia, polyuria and weight loss. Frequently such patients have been subjected to rigorous dietary control methods for a number of years, and in many instances they have been put to the annoyance of taking insulin, all of which is unnecessary if the proper measures have been employed to control the obesity. The cause of the glycosuria of obesity is not known definitely. One possible explanation of the condition is that the liver in obese persons is so infiltrated with fat that it does not function properly to convert the blood sugar to glycogen and vice versa. Consequently, the blood sugar will reach a level which is above normal, and glycosuria will appear. It is recognized, of course, that not all obese persons have sugar in the urine; but this may be because the carbohydrate function of the liver is not significantly disturbed until adiposity has been present for a considerable period of time.

Furthermore, obesity is a definite handicap as it produces symptoms which are directly due to the abnormal accumulation of fat itself. They are: increased warmth, dyspnoea, palpitation, foot strain, backache, ease of fatigue, and degenerative arthritis of the weight-bearing joints. It must be admitted that the arguments are all against the obese state; the only one in favor of it is the self-gratification which follows the over-indulgence in food.

The Cause of Obesity

It is amazing how many theories have been evolved to explain the cause of obesity, when the simple truth is that it results from the *consumption of an excess amount of energy in the form of food.* It is possible that heredity may play a role, but perhaps only in that it provides a person with a mental make-up which seeks the appeasement of an excessive appetite, or possibly obese persons acquire improper food habits from their parents who are also over-weight. *There is no convincing scientific proof that endocrine disturbances play an important role in the causation of obesity,* although this has long been the belief of many physicians. If this were true, one would expect that all patients with myxedema would be corpulent, as this endocrine disturbance characteristically has a very low basal metabolic rate; but they are not. The only method by which an endocrine disturbance could cause obesity is by increasing the appetite. Even if one adheres to the theory of the importance of the endocrine glands in relation to obesity in some patients, there are convincing data to indicate that satisfactory weight reduction in them can be accomplished by dietary measures alone.

There are two main reasons why so many theories have been evolved to explain obesity. The first is that many corpulent individuals insist that their appetites are not unduly large; and the second is that a person may have a caloric intake as low as 300 calories daily and fail to lose weight for a period of ten days to two weeks.

Obesity, in persons who insist that their food intake is small, can be explained by the fact that they ingest an excessive amount of concentrated food which has no residue, such as sugar, cream, butter, potatoes and bread. Furthermore, their diet contains an undue amount of fatty foods which have twice the caloric value of carbohydrate and protein. Finally, even such a small excess as *two hundred calories daily* over the actual needs of the body will result in a gain of approximately *nineteen pounds* in body weight *in one year.* Food yielding 200 calories is a relatively small proportion of the average twenty-four hour intake, and the average person cannot detect that this is being taken in excess, by either the eye or the appetite. It is, for example, the number of calories represented by a glass of milk, 2 tablespoonsful of butter, 3 slices of bread, a pint of beer, or 2 cocktails.

If a man consumed regularly each day, therefore, 200 calories more than his requirements, there would be a gain of approximately nineteen pounds in body weight in a year. At this rate of increase, if his weight at the age of twenty years was 110 pounds, at twenty-five years

it would be 205 pounds, at thirty years 300 pounds, and at thirty-five years 395 pounds. He would, therefore, be obviously corpulent at the age of thirty-five years and yet could say honestly that since the age of twenty years his appetite had not appeared to be abnormally large.

The failure to lose body weight for a short interval while consuming an exceedingly low caloric intake is a situation which presents no mysteries and does not require the assumption that some vague metabolic disturbance is active. It has been proven definitely by Newburgh and his associates* that such a paradoxical course of events results from a retention of water in the tissues. When a low diet is given, therefore, the patient will actually lose "flesh" but this is masked by the retention of water. This excess of tissue fluid is ordinarily not retained more than ten to fourteen days, but there is a possibility that it may be held somewhat longer. Eventually, if the low caloric intake is maintained, the fluid will be released suddenly and an immediate, and often a very large loss of weight, will occur within a few days. The possibility of retention of water is of practical importance, and patients should be warned that a temporary failure to lose weight may be due to this reason.

Treatment of Obesity

The treatment of obesity consists in prescribing a diet which is complete in every respect except for its caloric intake. For a number of years, a 1300 calorie anti-obesity diet, containing protein 65 gm., fat 60 gm., and carbohydrate 130 gm., has been used at the University of Michigan Hospital. Never has it failed to cause an obese person to lose weight, nor has any type of food deficiency been observed following its prolonged use. This diet contains approximately 1.0 gm. of protein per kilo of ideal weight for the average person; an adequate amount of calcium and phosphorus is present; there is the proper ratio between carbohydrate and fat, which prevents the development of an acidosis; and it provides all of the essential vitamins.

From my own experience I favor the use of a 1300 calorie diet. With such a food intake, one who is leading a life of normal activity will lose on the average at least 2 to 3 pounds of body weight a week. Furthermore, such a diet is a safe one, as it contains a sufficient quantity of carbohydrate to prevent an acidosis. In addition, it is a comfortable diet for the individual to consume and hence the subject is more likely to adhere to it. On the other hand, Dr. L. H. Newburgh, who has had a long experience in the treatment of obesity and has contributed so many fundamental facts which have a bearing on our understanding of the subject, has the opposite opinion. He believes that the slow loss of weight which accompanies the more liberal food intake is so discouraging that the patients often give up the diet after a few months. He recommends, therefore, that the calories be limited sharply, and hence prescribes a diet of only 450 calories a day. Patients who receive such a diet are instructed to restrict their activity sharply and are urged to enter the hospital for a preliminary period. When such a diet is given, the patient may develop an acidosis from the consumption of his own fat, especially if indulging in more than average physical activity. In such instances an additional 25 to 50 grams of carbohydrate should be added in order to overcome this. If a physician desires to use this diet I have no objection, provided the patients remain under observation. My own personal recommendation is, however, that reduction be accomplished by means of the 1300 calorie diet, especially if the patient is only moderately obese. The plan of such a 450 calorie diet with the means of adding 25 to 50 grams of carbohydrate is found at the end of this article.

* The statements regarding water balance and many other conclusions in this article are based upon the work of Dr. L. H. Newburgh, Professor of Clinical Investigation at the University of Michigan, and his associates. The author gratefully acknowledges the source of this information.

The Amount of Body Weight to Lose Weekly

The amount of weight which is lost weekly when a 1300 calorie diet is given daily, of course depends upon the extent of activity of the person receiving it. In general there is a loss of between two and four pounds a week, which is not an undesirable amount provided the patient is in good physical condition, other than having simple obesity. Nor is there any limit to how much weight can be lost in order to reduce to an ideal body weight. Dr. L. H. Newburgh, by giving a 300 caloric diet for the first year and 600 calories the second year, reduced a patient from a body weight of 560 pounds to 192 pounds. During this interval of 24 months, the average weekly loss was 3.8 pounds. No form of treatment was given except an anti-obesity diet.

Exercise is Unnecessary

It is not necessary to advise exercise for patients to lose weight. Satisfactory results may be attained even while the patient remains continuously at complete rest in bed, provided the proper diet is advised. In many instances, too much physical exercise is detrimental for corpulent persons who are middle-aged or older. Moreover, it is exceedingly difficult to "work off fat," for in the first place it has the disadvantage of stimulating the appetite, and, secondly, from the standpoint of results accomplished, it is hardly worth while. For example, the amount of energy contained in a pat of butter, weighing 10 grams, is sufficient to supply the energy needs required to climb the 525 feet of the Washington monument. A football player during a strenuous game may lose as much as fourteen pounds, but only one-third of a pound is actual flesh and the remainder is water loss which is regained as body weight within a few hours when an adequate amount of fluid is ingested.

Weight Reduction is Most Satisfactorily Accomplished by Dietary Means Alone

Weight reduction should be accomplished by dietary means alone, and it never fails to achieve the desired results. Some physicians advise the use of desiccated thyroid gland for the purpose of overcoming the decrease in the basal metabolic rate which almost always accompanies loss of weight. This is unnecessary for if it is desirable for the patient to lose weight more rapidly, this can be accomplished by a further curtailment of the diet. Moreover, desiccated thyroid gland may, in some patients, cause unpleasant symptoms such as dyspnoea and palpitation. Every physician now knows that dinitrophenol is contraindicated in the treatment of obesity on account of its serious untoward effects. Nor is it necessary to give added vitamins, calcium or phosphorus salts or any other medication, if a properly balanced anti-obesity diet is used. It should be impressed upon a patient who desires to reduce that there will never be an "easy" method of reduction, if by that term is meant

some method whereby the patient can "eat everything" and yet lose weight. The treatment of obesity can be condensed in the simple statement that it consists in the careful, intelligent, curtailment of the food intake.

Obesity and Pregnancy

In recent years it has been appreciated that the obese state in women during pregnancy is a menace as so many more complications incident to the gravid state occur under these circumstances. In general a woman should not gain more than 15 to 20 pounds during pregnancy. If it is necessary to reduce body weight or prevent further gain, the regular 1300 calorie diet should be given, to which is added one pint of skimmed milk. This will provide about 85 grams of protein and additional calcium and phosphorus. The pregnant woman must be maintained in nitrogen balance in order to build fetal tissues, and to assist in milk storage. In addition such an intake of protein is necessary in order to avert the development of a macrocytic anemia.

The Psychic Aspect of Obesity

It is not difficult to induce the average person to reduce the body weight by dietary means alone and to maintain it there for a period of several months. It is a different matter, however, to prevent patients from reverting to their former improper eating habits and reaccumulating weight again to the point where they are once more obese. In my opinion, most persons attain this state because they consume each day an amount only slightly greater than their needs. The important point is that they do this *every day* for weeks and months or years and consequently become conspicuously obese. In all corpulent persons, however, the psychic side should be investigated to ascertain if some emotional factor is active. Recently Freedman (*J.A.M.A.* 133:369, 1947) has emphasized that some persons eat more when they are nervous or worried or bored. It is certainly true that some of my obese patients live at an infantile level; they have few gratifying emotional experiences, and tend to substitute food for love and affection. Superficially such patients are often gay and entertaining. Many seem to enjoy playing the clown, but deep in their hearts they resent their lack of something which they have lost. It is this that they subconsciously try to replace with food. One of my patients lost weight periodically but was finally sent to me because there was no weight loss despite efforts of her physician to prevent obesity. A careful study of the emotional factors in her case revealed that she resented deeply the marriage to her husband of twenty years because she had assented to it only on the insistence of her father, as she had intensely desired to marry another with whom she was really in love. The only way she could free herself, at least temporarily, from her husband and the resentment of the union, was to gain weight. This was the thing in life which her husband detested most of all.

CLASSIFICATION OF FRUITS AND VEGETABLES

(According to Carbohydrate Content)

5% Vegetables
24 Cal. %

Asparagus
Bean sprouts
Broccoli
Cabbage
Cauliflower
Celery
Chard
Chinese cabbage
Cucumber
Egg plant
Endive
Greens, beet
Greens, mustard
Kohlrabi
Lettuce
Okra
Peppers
Pumpkin
Radish
Spinach
String beans
Summer squash
Tomatoes
Watercress
Turnips

5% Fruits

Honeydew melon
Lemon juice
Muskmelon
Rhubarb
Strawberries
Watermelon

10% Vegetables
44 Cal. %

Beets
Brussel sprouts
Carrots
Dandelion greens
Leeks
Olives, green
Onions
Rutabagas
Winter squash

10% Fruits

Blackberries
Cranberries
Currants
Gooseberries
Grapefruit
Lime juice
Oranges
Orange juice
Peaches
Tangerines

15% Vegetables
64 Cal. %

Artichokes, globe
Oyster plant
Parsnips
Peas

15% Fruits

Apples
Apricots
Blueberries
Cherries, sour
Grapes
Huckleberries
Loganberries
Mulberries
Pears
Pineapple
Plums
Raspberries

20% Vegetables
84 Cal. %

Beans, cooked
Lima
Kidney
Navy
Corn
Horseradish
Potatoes

20% Fruits

Bananas
Cherries, sweet
Figs, fresh
Grape juice
Prunes, fresh

5% veg. = 1 cup 10% veg. = ½ cup 15% veg. = ⅓ cup 20% veg. = ¼ cup

REDUCTION DIET—1300 CALORIES

(Protein 65 gm.; Fat 60 gm.; Carbohydrate 130 gm.: Calories 1300)

SAMPLE MEALS

Breakfast

5 or 10% fruit	½ cantaloupe
Bread (toasted or plain)	2 slices whole wheat toast
Butter	1 teaspoon of butter
Beverage	Coffee with top milk, saccharine if desired

Luncheon or Supper

Eggs or	2 poached eggs or
Lean meat, fish or Cottage cheese	1 serving
5% vegetables, raw or cooked	½ cup of greens with lemon juice
10% fruit or vegetable	½ cup of beets
Bread	1 slice of bread
Butter	1 teaspoon of butter
Beverage	1 glass of milk

Dinner

Lean meat or fish	1 serving of steak (3 ounces)
Salad of 5% vegetables	Combination salad, one serving (lettuce, tomatoes, cucumbers)
5% hot vegetable	½ cup of string beans
10% fruit	1 slice peach with top milk
Bread	1 slice whole wheat bread
Butter	1 teaspoon of butter
Beverage	1 cup

Milk: 1 pint of whole milk is used daily. If cream is desired for coffee or fruit, pour off the top of the milk.

Substitutes for the pint of whole milk:

a. 1 quart of skimmed milk (milk which has gone through the separator).
b. 1 pint of "cultured" buttermilk (if made from whole milk).
c. 1 quart of churned buttermilk.
d. ½ tall can of evaporated milk.

Beverages: Clear tea, coffee or bouillon may be used as desired.

Bread: White, whole wheat or rye. Whole wheat, graham or rye bread are preferable because they contain vitamin B and iron.

Salad dressing:

1. Vinegar and condiments.
2. Mayonnaise or French dressing made with mineral oil.

Meat, eggs or fish may be prepared by any method except frying. The visible fat should be trimmed from the meat when it is ready to be served.

Saccharine is used as a substitute for sugar.

REDUCTION DIET—450 CALORIES

(Protein 60 gm., Fat 10 gm., Carbohydrate 32 gm.: Calories 450)

PLAN

Breakfast

Fruit	100 gm. (½ cup)
Skimmed milk	200 gm. (1 glass)
Beverage	

Lunch

Lean meat	75 gm. cooked wt. (½ size of palm of hand)
Vegetable, 5%	75 gm. (⅓ cup)
Skimmed milk	100 gm.
Beverage	

Dinner

Lean meat	75 gm. cooked wt.
Vegetable, 5%	75 gm. (⅓ cup)
Skimmed milk	100 gm.
Beverage	

SAMPLE MENU

Breakfast

Strawberries	100 gm.
Skimmed milk	200 gm.
Coffee	ad lib

Lunch

Broiled lean beef	75 gm.
Cucumber and celery salad	75 gm. (1 cup)
Mineral oil dressing	ad lib
Cooked cabbage	75 gm. (⅓ cup)
Skimmed milk	100 gm.
Tea	ad lib

Dinner

Bouillon	ad lib
Roast chicken	75 gm. (small service, as first joint)
Lettuce	75 gm. (¼ head)
Mineral oil dressing	ad lib
Spinach	75 gm. (⅓ cup)
Skimmed milk	100 gm.
Coffee	ad lib

TABLES OF IDEAL WEIGHTS BASED ON THE WEIGHT AT 30 YEARS

MEN

Height	*Weight*	*Height*	*Weight*
5 ft.	126 lbs.	5 ft. 9 in.	156 lbs.
5 ft. 1 in.	128 lbs.	5 ft. 10 in.	161 lbs.
5 ft. 2 in.	130 lbs.	5 ft. 11 in.	166 lbs.
5 ft. 3 in.	133 lbs.	6 ft.	172 lbs.
5 ft. 4 in.	136 lbs.	6 ft. 1 in.	178 lbs.
5 ft. 5 in.	140 lbs.	6 ft. 2 in.	184 lbs.
5 ft. 6 in.	144 lbs.	6 ft. 3 in.	190 lbs.
5 ft. 7 in.	148 lbs.	6 ft. 5 in.	201 lbs.
5 ft. 8 in.	152 lbs.		

WOMEN

Height	*Weight*	*Height*	*Weight*
4 ft. 8 in.	112 lbs.	5 ft. 5 in.	134 lbs.
4 ft. 9 in.	114 lbs.	5 ft. 6 in.	138 lbs.
4 ft. 10 in.	116 lbs.	5 ft. 7 in.	142 lbs.
4 ft. 11 in.	118 lbs.	5 ft. 8 in.	146 lbs.
5 ft.	120 lbs.	5 ft. 9 in.	150 lbs.
5 ft. 1 in.	122 lbs.	5 ft. 10 in.	154 lbs.
5 ft. 2 in.	124 lbs.	5 ft. 11 in.	157 lbs.
5 ft. 3 in.	127 lbs.	6 ft.	161 lbs.
5 ft. 4 in.	131 lbs.		

COUNTY SOCIETY REPORTS

HONOLULU COUNTY MEDICAL SOCIETY

A regular monthly meeting of the society was held November 5, 1947. Only 32 persons attended, though members of the Hawaii Territorial Dental Association had been invited.

The final copy of the proposed revision of the Constitution and By-laws was read in full by the Corresponding Secretary.

It was announced by the President, Dr. Hill, that Dr. Koon Sun Fong had been elected to regular membership in the Society, and Capt. Robert W. Goltz, M.C., U.S.A., to service membership.

The following recommendations of the Committee on Forms of Medical Practice, approved by the Board of Governors, were called to the attention of the members:

(a) The Committee strongly deplores the competitive private practice of medicine or surgery by any physician or group of physicians in any county other than the one of which he or they are residents without their first securing the approval of the medical society in that country. It is customary—and in Hawaii the geographical situation and other factors make it particularly desirable—for doctors to limit their private practice largely to the county in which they are members of the local medical society, except of course for consultation work. The Committee feels that infractions of this principle are likely to lead to bad feeling between or among the county medical societies.

(b) The Committee strongly deplores any use of radio to announce the opening or the resumption of medical practice.

A guest speaker, Dr. Emil F. Tholen, Professor of Oral Surgery at the University of Southern California, spoke on Salivary Gland and Duct Calculi. The lecture was illustrated with numerous lantern slides, and was followed by considerable discussion. Refreshments were served on the lanai at the end of the meeting.

* * *

A special meeting of the Society was called on December 5, 1947, for the purpose of discussing the public relations program of the Territorial Association. The following members were present:

Arnold, Jr.	Gotshalk	Lichter	Richert
Bachman	Hartwell	Lynam	Shinkawa, T.
Bailey	Hata, H.	Majoska	Stevens
Batten, G. H.	Hata, T.	Marks	Strode
Bell, J.	Hill	Mermod	Stewart
Beck	Inouye	Millard	Tilden
Berk	Irwin, F.	Milnor, G.	Trexler
Childs	Izumi	Moffat	Wall
Cooper	Jacobson	Morong	West
Devereux	Kong	Murray	Withington
Doolittle	Lam, J.	Phillips	Wong, Robert
Faus, R. B.	Lee, R. K. C.	Pinkerton, F. J.	Yoshina
Gordon	Li, B.	Price	Young

Guests present were Drs. F. K. Chu, Walter Quisenberry, L. L. Sexton, John Lynn, and Mr. W. M. Jackson, Mr. Carl Flath, Mr. Chester V. Kiltz, Mrs. Price, and Mr. Allen Thompson, Vice-President and Actuary of the Associated Hospital Service Plans of New York, and Vice-President of the Associated Medical Service Plans of New York.

The background, and activities to date, of the Medical Economics and Public Relations Committee of the Hawaii Territorial Medical Association were reviewed and discussed at length by Dr. Hill and by the members of the Committee: Drs. Pinkerton (Chairman), Phillips, Izumi, and Faus. Mr. Allen Thompson then read a report of his observations, criticisms and recommendations regarding the Hawaii Medical Service Association. The highlights of these were as follows: that the Association should stop emphasizing office and home care insurance on the ground that it usually covered sums too small to have either social or insurable value, and emphasize hospitalization insurance instead, selling it to large groups when possible and to individuals when necessary; that the graduated fee and premium schedule be abandoned in favor of a single fee lower than the present "C" schedule fee for each service; that the public be given greater representation on the Association's Board; that the name be changed to suit the change in emphasis on the service offered; that the present upper limit on the income of eligible participants be removed, providing instead that single persons earning over $1,800 or heads of families earning over $2,500 may be asked by the physician to pay more than the scheduled fees; and that the Association withhold perhaps one-third of the physicians' fees in order to create a reserve fund. The members present voted to approve in principle, and recommend for adoption by the H.M.S.A., all of Mr. Thompson's suggestions.

After a prolonged discussion of the Medical Economics Committee's activities, with many specifically critical comments upon certain features of them, it was moved and seconded that the Committee be asked to circularize the membership of the entire Association with a questionnaire inviting full expression of opinion on each of the Committee's activities, with suggestions for modification of them or additions to them. The motion was passed by a vote of 26 to 7. The meeting was adjourned at 11:20 p.m.

* * *

Post-graduate lectures by Dr. Sterling Bunnell, President of the American Society for Surgery of the Hand, were attended by a large audience, composed chiefly of members of the Society, on the evenings of December 9, 10, and 11, in the auditorium of the Mabel Smyth Memorial Building.

* * *

The regular monthly meeting of the Society was held December 12, 1947; it was attended by 50 members, and Mr. Dudley C. Lewis, attorney, was present by invitation. A movie entitled Pediatric Anesthesia was shown through the courtesy of E. R. Squibb.

A letter from the City and County Treasurer was read, urging physicians to communicate with him in the event of failure of City and County employees to pay medical bills within a reasonable period of time. A letter was read from Mr. Neal Ifversen, announcing that Dr. Fred Irwin had been changed from a part-time to a full-time basis with the H.M.S.A., at an appropriate increase in salary.

The revised version of the Constitution and By-Laws, which had been read at a previous meeting and mailed to all members, was brought up for discussion. A detailed copy of the discussion may be found in the

Society's minutes. The proposed version was subjected to several modifications, deletions, and additions, and was finally accepted by almost unanimous vote.

The meeting was adjourned at a surprisingly early hour, and refreshments were served on the lanai afterward.

S. L. YEE, M.D.
Recording Secretary.

KAUAI COUNTY MEDICAL SOCIETY

A meeting was called to order by Dr. Toney at 7:00 p.m., November 12, 1947 at the Wilcox Memorial Hospital staff room. Those present were Doctors Boyden, Wade, Fujii, Wallis, Masunaga, Toney, and Cockett. Dr. Goodhue was present as guest.

A letter dated October 31, 1947, from the president of the Honlulu County Medical Society concerning the matter of the Kauai Eye Clinic was read to the members, and after some discussion, Dr. Boyden moved that the letter be filed and this matter closed.

A letter dated October 15, 1947, from Dr. C. M. Burgess was read to the members concerning the matter of the awarding of trophies in the last Territorial Medical Association golf tournament. The members moved that the secretary answer his letter concerning their decision which is that (1) The McKesson and Van Poole cups were to have the names of all three of the doctors —Burgess, Nishigaya, and Fujii—engraved on them and were to be kept in the office of the president of the Territorial Medical Association until the next annual golf tournament. The president's cup, which was to have been donated by Dr. Kuhns, was not available for discussion due to the absence of Dr. Kuhns. The gold cup donated by the Lihue Plantation Store is to be awarded to each of the above doctors. The Kauai County Medical Society members recommended that the secretary-treasurer purchase two cups similar to the one donated by the Lihue Plantation Store in order that each of the triple-tie winners may have a cup engraved with his name on it. The secretary was instructed to search for a copy of a letter written to the president of the Hawaii Territorial Medical Association (Dr. Robert E. Faus) and make another copy to be sent to both Doctors Faus and Burgess.

A letter from Dr. Hon Chong Chang was received and read concerning the matter of payment of dues while specializing in radiology on the mainland. The members voted that he be advised to pay $37.00 a year active membership dues commencing from the period of termination of active duty in the Medical Corps of the United States Army and up to date. He was exccused from all special assessments including the medical economics fee.

An editorial from the local Honolulu Advertiser was brought up by the secretary-treasurer concerning the matter of the appointment of someone else other than Mr. Eddie Chong to the position of registrar general of the Board of Health, Territory of Hawaii. The members voted that the secretary write a letter to Dr. Charles L. Wilbar, president of the Territorial Board of Health, for further information concerning this matter.

The matter of the Kauai County Medical Service Association was discussed, but no action taken in the matter. Dr. Wallis presented the highlights of his attendance to the Council of the Territorial Medical Association.

* * *

A meeting was called to order by Dr. Toney on December 10, 1947. Those present were Doctors Toney, Masunaga, Wade, Wallis, and Cockett. Mr. Kimball, president of the Board of Directors of the Hawaii Medical Service Association, Dr. Lynn, psychiatrist and neurologist for the Territorial Board of Health, Dr. Burns, resident at Wilcox Hospital, and Mr. Achor, manager of the Kauai Medical Service Association, were present.

Mr. Kimball discussed the H.M.S.A.

Benefits: He said that the benefits of the association would be extended to its members in order to prevent an accumulation of too large a surplus reserve of income. He also advocated extension of the hospital plan of the association throughout the islands. He discussed the Pineapple Plan which is to be started on the island of Kauai in the near future. He received a unanimous vote of the members in favor of consolidating Kauai Medical Service Association with the Honolulu office of the Hawaii Medical Service Association.

Dr. Lynn, Director of the Bureau of Mental Hygiene, Territorial Board of Health, discussed his position as full-time psychiatrist and neurologist. He spoke about his plan of extending his work to the island of Kauai twice a month in the near future. He intended to render treatment as well as consultation for diagnosis. He asked that the fees from private patients be donated to a local mental hygiene fund, which was to be administered by him through the Kauai Medical Society for the purchase of equipment, drugs, and other miscellaneous expenses. The members, by a unanimous vote, agreed that the secretary-treasurer of the Kauai County Medical Society keep account of this special mental hygiene fund.

Dr. Wallis brought up the subject of hospitalization on the island of Kauai from excerpts of a previous Board of Directors meeting of the Wilcox and Waimea hospital staffs concerning: (1) A central hospital in Lihue, Kauai; (2) Two hospitals on Kauai located in Waimea and Lihue; (3) Consolidation of doctors on the island of Kauai into medical groups with dispensaries located in each plantation town to be administered by the group physicians. No discussion or action taken on this matter by the members.

PATRICK M. COCKETT, M.D.
Secretary-Treasurer.

THE HONOLULU COUNTY MEDICAL LIBRARY

MRS. ETHEL HILL, *Librarian*

MISS JANE EISENHAUER, *Library Assistant*

PHONE 65370

8:00 a.m. to 4:30 p.m., and 7:30 p.m. to 9:30 p.m.
Monday through Friday

Closed Saturdays at noon and Sundays
Closed all day and evening on National holidays
and at noon on Territorial holidays

REGULATIONS

Loan privileges extended to all regular and honorary members of the Hawaii Territorial Medical Association, the Nurses' Association of the Territory of Hawaii, internes, residents, and doctors in the Territory who through no fault of their own are unable to become members of the Territorial Association.

Medical officers of the armed forces and Public Health Services stationed in Hawaii may be elected to membership upon payment of $5.00 per annum, with full library privileges.

Use of books and journals *in the library* is extended to the above and also to all military medical personnel, University students and authorized research workers.

Any professional person desiring restricted or temporary *loan* privileges may apply for guest membership by filling out an application form. This form must be signed by a sponsor who is the head of the applicant's organization, or in event of absence, the acting head. A nominal charge of $1.00 a year is made in order to help defray library costs and depreciation on books and journals, and a "Guest Membership" card is issued.

Physicians wishing to refer patients to the Medical Library may do so by giving the patient a note stating the particular reference to be used *in the library;* or loan privileges may be granted *on the doctor's name.*

RECENT ACQUISITIONS

Biography

Freud, Sigmund *Autobiography.* c1935. (From Bureau of Mental Hygiene.)

Runes, D. D., ed. *The selected writings of Benjamin Rush.* c1947. (Gift of publisher.)

Sachs, Hanns *Freud, master and friend.* c1944. (From Bureau of Mental Hygiene.)

Neurology and Psychiatry

Cobb, Stanley *Borderlands of psychiatry.* c1943. (From Bureau of Mental Hygiene.)

Cobb, Stanley *Foundations of neuropsychiatry.* 2nd ed. rev. c1941. (From Bureau of Mental Hygiene.)

Freud, Anna *Psychoanalysis for teachers and parents.* c1935. (From Bureau of Mental Hygiene.)

Freud, Sigmund *Beyond the pleasure principle.* n.d. (From Bureau of Mental Hygiene.)

Freud, Sigmund *Group psychology and the analysis of the ego.* n.d. (From Bureau of Mental Hygiene.)

Freud, Sigmund *Psychopathology of everyday life.* n.d. (From Bureau of Mental Hygiene.)

Freud, Sigmund *Wit and its relation to the unconscious.* c1916. (From Bureau of Mental Hygiene.)

Hartwell, S. W. *Practical psychiatry and mental hygiene.* c1947. (Gift of publisher.)

Hinsie, L. E. *Syllabus of psychiatry.* 1933. (From Bureau of Mental Hygiene.)

Strecker, E. A. *Fundamentals of psychiatry.* c1943. (From Bureau of Mental Hygiene.)

Wechsler, I. S. *A textbook of clinical neurology.* 6th ed. c1947. (Gift of publisher.)

Nursing

Bentley, J. E. *General psychology.* c1947. (Gift of publisher.)

Deming, Dorothy *The practical nurse.* c1947. (From Nurses' Association.)

Gill, E. S. *Laboratory manual of microbiology for nurses.* c1947. (Gift of publisher.)

Houghton, L. E. *Aids to tuberculosis nursing.* 2nd ed. 1946. (From Tuberculosis Association.)

Morse, E. C. *College chemistry in nursing education.* c1947. (Gift of publisher.)

Pharmacology and Therapeutics

Bastedo, W. A. *Pharmacology, therapeutics and prescription writing.* 5th ed. c1947. (Gift of publisher.)

Eggleston, Cary *Essentials of prescription writing.* 8th ed. c1947. (Gift of publisher.)

Sex Education

Baker, J. N. *Sex education in high schools.* c1942. (From Bureau of Mental Hygiene.)

Deutsch, Helene *The psychology of women.* 2v. c1944-45. (From Bureau of Mental Hygiene.)

Doshay, L. J. *The boy sex offender and his later career.* c1943. (From Bureau of Mental Hygiene.)

Ellis, Havelock *Studies in the psychology of sex.* v. 1, 2, 3, 5. c1906-13. (From Bureau of Mental Hygiene.)

Forel, August *The sexual question.* 2nd ed. n.d. (From Bureau of Mental Hygiene.)

Henry, G. W. *Sex variants.* 2v. c1941. (From Bureau of Mental Hygiene.)

Kahn, Fritz *Our sex life.* 2nd ed. rev. c1942. (From Bureau of Mental Hygiene.)

Lindsey, B. B. *The companionate marriage.* c1929. (From Bureau of Mental Hygiene.)

Meisel-Hess, Grete *The sexual crisis.* 2nd ed. c1917. (From Bureau of Mental Hygiene.)

Strain, F. B. *New patterns in sex teaching.* c1934. (From Bureau of Mental Hygiene.)
Strain, F. B. *Sex guidance in family life education.* c1942. (From Bureau of Mental Hygiene.)
Swift, E. H. *Step by step in sex education.* c1938. (From Bureau of Mental Hygiene.)
Van de Velde, Th. H. *Sex hostility in marriage.* c1928. (From Bureau of Mental Hygiene.)
Weininger, Otto *Sex and character.* 6th ed. n.d. (From Bureau of Mental Hygiene.)
Westermarck, Edward *The history of human marriage.* 3v. 1921. (From Bureau of Mental Hygiene.)
Wolbarst, A. L. *Generations of Adam.* c1930. (Gift of Dr. N. M. Benyas.)

Tuberculosis

Kraetzer, A. F. *Procedure in examination of the lungs.* 3rd ed. rev. c1947. (From Tuberculosis Association.)
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The Library wishes to acknowledge the gift of a group of nurses known as the "Old Guard" in memory of Dr. Judd. Their ten-year subscription to the *Archives of Surgery* and *Surgical Clinics of North America* will be not only a valuable contribution to our collection but also a most fitting and permanent monument in the name of this great surgeon.

BOOK REVIEWS

Gifford's Textbook of Ophthalmology. By Francis H. Adler, M.D. 4th ed. 512 pp. with 310 illus. Price $6. Philadelphia and London. W. B. Saunders Company, 1947.

This book is ideal for the medical student and the physician not specializing in ophthalmology. The usual texts give too much specialized knowledge which would never be used by the general physician and too little to enable him to treat adequately those patients who regularly come to him before seeing a specialist. The author has given special attention to the elimination of many of the technical aspects of ophthalmology in favor of a concise, specific, yet comprehensive coverage of the fundamentals of this specialty. The text and references have been brought up to date. There is satisfactory emphasis on physiology of the eye. Stress is given to ocular changes in medical and neurological disorders and detailed medical and other non-operative treatments are presented.

The book is characterized by its simple and clear language and the reader should be able to recognize many of the common ocular disorders that come to the attention of the general practitioner. Of value also, to many oculists whose knowledge of neurology is casual and scanty, there are several excellent sections on neuro-ophthalmology.

This book can be considered an authoritative elementary text on ophthalmology of considerable value to medical students and the general practitioner.

ROBERT T. WONG, M.D.

* * *

Laboratory Manual of Microbiology for Nurses. By Elizabeth S. Gill, B.S., R.N., and James T. Culbertson, Ph.D. Price $1.50. G. P. Putnam's Sons, New York, 1947.

This manual has been prepared particularly for student nurses with an emphasis on the handling and recognition of pathogenic organisms which is usually lacking in most of the elementary microbiology courses.

The material for the experiments has been chosen for its applicability to nursing. The exercises are arranged to give the student an understanding of the growth, transfer and destruction of non-pathogenic and pathogenic organisms as well as the "parasites" or protozoans, helminths and arthropods.

Each experiment gives a brief description of the subject to be studied, a list of the material necessary, special instructions for the experiment and questions to be answered by the student. Adequate space has been provided for answering these questions and for sketches of microscopic observations.

The pages of this loose leaf manual are easy to remove and replace, thus making it possible for the instructor to review the student's work without depriving the student of her manual.

MIRIAM L. KELLER, R.N.

New and Non-Official Remedies. By Council on Pharmacy and Chemistry of the American Medical Association. 1947 ed. Pp. 749. J. B. Lippincott, Philadelphia. 1947.

The 1947 edition of this book is entirely up to the high standards set by its predecessors, which is perhaps all that one needs to say about it. Quite a large list of the newer accepted remedies are included, as for example, digoxin, streptomycin, thiouracil, benadryl, demerol, etc. As is usually the case, quite a number of items are omitted because they have, since the last edition, been made official pharmacopoeial preparations.

There is one feature of the book which deserves the very highest praise and which is lacking in other books of this sort, as far as I have been able to see. When a proprietary substance becomes popular under the proprietary name, as has so often been the case, and it is finally put on the market under its chemical or non-proprietary name, it is often difficult for the practitioner to find the substance unless the proprietary name, with which he was previously familiar, is included in the index. In this book, such proprietary names are continued: for example, Mecholyl, which is now marketed under the non-proprietary name of methacholine, may be found under both names in the index.

Every physician and every pharmacist needs this book on his shelf.

H. L. ARNOLD, M.D.

* * *

Internal Medicine in General Practice. By Robert Pratt McCombs, B.S., M.D., F.A.C.P. 2nd ed, illus. 741 pp. Price $8. W. B. Saunders Company, Philadelphia, 1947.

This book generally discusses medical conditions, diagnosis, treatment, etiology, and the various factors influencing the treatment of various diseases. The discussions are concise and brief and in the main are informative and helpful, particularly to one who is reviewing numerous subjects in a rather hurried manner. The discussions are by no means complete from all standpoints, leaving out some details of differential diagnosis, etiology and treatment. However, for the space allotted, a fairly good job is done on each condition.

In reviewing this book, I have had the impression that this type of approach to diseases of internal medicine for the practitioner and student is not the one best suited to one who is reading for references on a subject, since the discussions here are not complete enough to give the reader all the information he may need. The very necessity of making the discussions brief destroys much of the value, particularly as to completeness. This type of book is practical for a hurried review of the field of medicine, but it should not be used as a book in which to obtain complete knowledge of any one condition.

F. L. GILES, M.D.

A Textbook of Clinical Neurology—With An Introduction to the History of Neurology. By Israel S. Wechsler, M.D. 6th ed. 829 pp. with 162 illus. Price $8.50. Philadelphia, W. B. Saunders Company, 1947.

This excellent, concise, and complete textbook of clinical neurology is in its sixth edition since its first appearance twenty years ago. It has again been revised and brought abreast of the rapid progress in neurology, particularly in respect to the more favorable prognosis of many of the so-called incurable diseases, resulting from recent advances in the physiology of the nervous system, the newer methods of diagnosis, and the more favorable response to chemotherapy, surgery, and other forms of treatment.

A new approach in psychometric examination which the author has rewritten in collaboration with his brother, Dr. David Wechsler, Ph.D. in psychology, is well worth perusal. The chapter on neurosis should be of special interest to the general practitioner, who undoubtedly is daily confronted with problems of functional cases in his practice. The short summary, covering the various etiological factors, the biological background, and the psychoanalytic aspects, is well worth reviewing.

In view of the recent intensified interest in poliomyelitis, convulsive seizures, skull injuries, etc., I can not recommend a better or a more handy textbook than the present edition of Dr. Wechsler's.

The thirty odd pages of his Introduction to the History of Neurology is a timely contribution. He says "neurology in general is as old as medicine; as a specialty, it is as young as yesterday." From the great lore of medical literature on the history of medicine, he has succeeded in condensing and weaving a very interesting and fascinating story of the struggles of the early observers—a formidable list of investigators, all famous in medical history—properly evaluating their contributions, however insignificant they might have been; for the sum total of their efforts paved the way to our modern knowledge of neuro-anatomy, and clinical neurology; but in the fields of neurophysiology, biochemistry, and biophysics of the nervous system, we are "not even fledglings out of their shells."

M. F. Chung, M.D.

* * *

The Selected Writings of Benjamin Rush. Edited by Dagobert D. Runes. Pp. 433. Price $5. Philosophical Library, New York, 1947.

A brief prefatory biography and twenty-nine selected essays depict, in this book, a man who was intimately concerned with the formation of the United States of America; a signatory to the Declaration of Independence; a close friend of Thomas Paine; a leader among physicians of his day, as well as among statesmen; a scholar, humanist, naturalist, and practical sociologist. He was Professor of the Institutes and Practices of Medicine in the University of Pennsylvania, but his interests extended far beyond the responsibilities of medical teaching and practice.

His lucubrations were more pro- than anti-, in general; but he was bitterly and outspokenly opposed to war, slavery, "strong spirits" (he approved heartily of beer and wine), and ungodliness; he was also critical of the Roman Catholic Church, the death penalty for murderers, caning or "feruling" schoolboys, and the refusal of some physicians to embrace blood-letting as a therapeutic measure.

He strongly urged the formation of a Secretariat of Peace in the Federal government, in addition to the Secretariat of War. He recommended golf, a form of light exercise "much used . . . in Scotland. A large common in which there are several little holes is chosen for the purpose. It is played with little leather balls stuffed with feathers; and sticks made somewhat in the form of a bandy-wicker." He approved the use of cosmetics by women.

Benjamin Rush was a highly intelligent, thoughtful, moral, vigorous and outspoken physician and citizen. These selections from his writings go down with ease and whet the appetite for more.

Harry L. Arnold, Jr., M.D.

* * *

Essentials of Prescription Writing. By Cary Eggleston, M.D. 8th ed. 155 pp. Price $2. W. B. Saunders Company, Philadelphia, 1947.

Simplicity seems to be the keynote of this book. Simplicity in the manner in which it is written, and urging simplicity in the practice of the written prescription.

While two chapters are devoted to the proper use of Latin in the prescription, the remainder of the book deals almost exclusively with the prescription in English, based on the thirteenth revision of the *United States Pharmacopoeia* and also the *National Formulary* and *New and Nonofficial Remedies.*

It is felt that the busy modern practioner will benefit by his suggestions and to quote the author, "If physicians would only make greater use of the *Pharmacopoeia,* the *National Formulary* and *New and Nonofficial Remedies* they would find their labors greatly lightened."

This handbook truly would seem to merit an hour's attention.

Clinton D. Summers, R.Ph.

* * *

Endogeneous [sic] *Endocrinotherapy Including the Causal Cure of Cancer: Compendium.* By Dr. Jules Samuels. Pp. 539, 30 illus. Price not given. Holdert & Co., Amsterdam, 1947.

Dr. Samuels styles himself "specialist for endogeneous [endogenous?] endocrinotherapy," and the book contains just about the sort of statements that one would instinctively expect a "specialist for endogeneous endocrinotherapy" to make. For example: "hyperfunction of the thyreotropic center" is said to be the cause of Hodgkin's disease, pernicious anemia, gigantism and acromegaly, cachexia, and Buerger's disease.

A diagnostic method ("spectroreductometry"), an investigative technic (the "endocrinogram" and the "cyclogram"), and a therapeutic procedure ("endogeneous endocrinotherapy," by medical diathermy) are described in the book. The author has been employing these successfully, he says, for about twelve years. It seems odd that in this length of time so little publicity should have been given it, for the results are apparently downright miraculous.

The book can be recommended only to those interested in medical curiosa and nostrums.

Harry L. Arnold, Jr., M.D.

REMINISCENCES OF DECEMBER SEVENTH: III

REPORT TO A MEETING OF THE HAWAII COUNTY MEDICAL SOCIETY

I feel rather diffident in having occasioned this meeting; however, I have had certain opportunities, and it has appealed to me that, if I could pass along any benefits or knowledge that I had acquired, it was my duty to do so, particularly as Society affairs in part accounted for my being in Honolulu. We may think they won't hit here again. That attitude might be unfortunate, so I thought it better be now and not next month.

If I am unable to tell you anything today that will be of benefit it will not be from lack of opportunity, but rather inability to observe and deduce from my observations.

I will take up my connection with events while in Honolulu in a rather chronological manner. On the Sunday morning of the 7th of December there was a meeting at 9:00 o'clock at the Mabel Smyth Memorial Building to hear a lecture by Dr. Moorhead, that had been postponed from the previous day. Just before the lecture, while gathered outside the lecture room, Dr. Hodgins arrived from Pearl Harbor, very excited, telling of hearing bombing and seeing a cruiser lying on her side and burning at Pearl Harbor. His information was received in rather a disbelieving way, so much so that he proceeded himself to believe that what he was seeing was anti-aircraft practice, and we went in and sat down at the lecture. However, there seemed to be an uncertainty in the air from that time. Dr. Moorhead began his lecture by mentioning that he had served in France in the last war and that if the opportunity came he wanted to do his bit again in any capacity which he could. After a few minutes one or two individuals were called from the lecture, and then an announcement was made through the loud speaker that surgical teams and medical help were wanted at Tripler. We then, of course, realized that something was happening. I got in the car with Dr. Hodgins and we started toward Tripler, which is on the old road out of Honolulu toward Pearl Harbor. Traffic going out was already dense, consisting of the greater part of men from the various posts who were trying to return to duty.

After some delay owing to traffic, we reached the hospital and went up to the operating floor. Certain surgical teams, which had previously been arranged for under the civilian defense committee of the Medical Society, were arriving and ready to work. Dr. Moorhead and myself, having no previous connections, teamed up together and were assigned to a table. Already the wounded were covering the floors of the halls and every available space leading to the theatre.

My observations from now on will be largely the product of my association with Dr. Moorhead over the next two days, and it is on the authority of that association that I am talking today. When I mentioned to him that I expected to quote my experiences and hoped that I would not misinterpret his opinions, he was good enough to say that he was quite willing to take a chance on that.

I cannot posibly recall to you all the cases. I will just mention a few cases, which will bring out all the points that I want to make as I go along from here.

The first patient that came to us had a traumatic amputation of the hip. One leg had been shot off right through the hip joint leaving a stump of the femur about three or four inches long. This was this man's only wound. In this case about two inches of the femoral artery was lying exposed on the tissues just like a finger, and filled with clot. It seems hard to understand why he had not died from hemorrhage. However, there was firm clot in this exposed portion of the artery.

Right here I want to say in partial explanation that the type of surgery that was being done was the mass surgery of a tremendous emergency.

The first procedure in this, and in all cases, was to wash about the wound with soap and water, and then flush the wound itself with sterile water or salt solution, then ligation of the large vessels, debriding of devitalized tissues and skin, merely tacking the remaining flap to the wound with no attempt at covering. A note was given to the anesthetist of what had been done, and the patient was returned to the ward with an order for an immediate transfusion.

I want you to note that there was a history of what was done made at the end of this case, as well as in all subsequent cases.

The next case was a compound fracture of the tibia and fibula with a large portion of the calf torn away. And here is a point I want to make. On quickly sizing up this injury Dr. Moorhead said, "Amputation." There may have been a query in my expression, because it looked to me like a case which, under individual conditions, we might have treated conservatively. However, he quickly

said that with the amount of destruction of tissue, the condition of the bones, the splintering of the fragments, coupled with the fact that these cases when they go out from these emergencies are not under your observation, and that amputation in such a case was a life-saving procedure. Later he brought out the fact that an artificial leg in this type of case is of much more use than a mutilated and painful leg.

Now, there were a large number of amputations performed those days. While a man with the experience of traumatic surgery of Dr. Moorhead could make a quicker decision, it seems to me that an amputation for us should require a getting together for a moment of time, even though very brief, before coming to the decision to amputate, except in very clear cut cases.

This amputation was a chop, or guillotine amputation performed below the knee through the bones, not through the joint, even though higher amputation may be later required.

Right here I will bring in the use of the sulfonamide powders, sulfanilamide and sulfathiazole. In our first case, after debriding we packed and dusted the wound and filled its interstices with sufanilamide powder. The same was done in each case. There was, perhaps, not an actual scarcity of this medication, but it was difficult to keep it at hand, and it came to the point where you were conserving it from each case and hiding it in a corner near your table. And here I want to say that there was a very great waste of these drugs. Perhaps in the excitement of the first day it was unavoidable, but the waste carried over not only the next day, but in subsequent days in dressings in the wards. In the attempt to shake these powders from pound bottles or from long test tubes you almost had to be wasteful. In this connection I believe that the sulfa powders should be provided in wide-mouthed bottles in various sizes so that you could pick out the one suitable to do the work that has to be done. The bottles should be wide-mouthed so that a dressing forceps handle or a tongue blade could be passed through and the powder taken out and put where it is supposed to go—to pack among the muscles, into the fascial spaces and into all the broken spaces in the tissues. This cannot be done with a shaker, but to get the powder into all the interstices of the wound it has to be carried there. I think some such solution would save three-fourths of the supply, and be more efficient.

The next case I am going to mention was a compound fracture of the femur, above the knee, in which the projectile had traversed the thigh transversely and was not in the tissues. The circulation was efficient in this case and the decision was to preserve this leg. The treatment then consisted of excising the wound or entry and the wound of exit completely, and then debriding all the devitalized tissues down to the bone. This was done in a very thorough manner, not sacrificing any tissues that were vital, but removing all tissues that were dark and which did not bleed when cut into. The Thomas splint was applied and a Kirschner wire was put through the malleolus for extension. After thorough treatment with the sulfa powder dressings were applied. In future cases instead of saying sulfanilamide or sulfathiazole I will just say "sulfa powder," because the word will be used often.

The next case I will tell you about was a gunshot wound of the abdomen. The bullet had entered the abdomen just above the anterior superior spine on the left, and there was no wound of exit. X-ray showed a projectile on the right side under the liver. The surgical treatment was as follows: The wound of entrance was excised and debrided. An incision was then made in the midline above the umbilicus. There was massive hemorrhage in the abdomen. After swabbing out the blood, the first examinations were made on the right up under the liver in the location of the foreign body in the X-ray. The bullet was found free in the peritoneal cavity. There was no evidence of hemorrhage from the liver or stomach, or transverse colon. Then, backing down toward the wound of entrance, we began to find perforations in the jejunum and ileum. In one section of the jejunum in a distance of about fifteen inches there were seven perforations. I will mention the size of the bullet removed. In appearance it was the size of a 30.30 bullet with cartridge. It came to a very sharp point, and it was not mutilated. It was said to be from a large size, I forget the calibre, machine gun such as are mounted on airplanes. The perforations were some through the mesenteric portion and some through the free bowel, and had gone through the bowel leaving wounds of entrance and exit. The remarkable thing was the way these wounds had closed down and contracted to a mere pinpoint. These perforations were closed by a double line of silk sutures Lemberting them in. These sutures were placed in the long axis of the bowel so as to minimize the encroachment on the lumen. Altogether about twenty-one perforations were found in this case and closed in the same manner. The whole bowel was looked over from ligament of Treitz to the ileo-cecal region. Sulfa powder was then dusted extensively within the peritoneal cavity and the incision closed. A

vaseline strip was placed in the wound of entrance down to the peritoneal cavity.

I may say right here that on Monday morning when we were starting to work after a few hours off, Dr. Moorhead said, "Now let's review a bit. What did we do yesterday that, if we had to do over again, we would do differently?" One or two things were mentioned, such as the treatment of shock, etc., and then I said, "Well now, wouldn't we resect that loop of intestine that had so many perforations in it, instead of suturing the individual perforations"? His answer was "No," that a resection adds tremendously to the shock and the future risk of these cases. I can see the point, although I think that in civilian practice with an injury of this kind that you had completely under your control for follow-up with Wangensteen, observation of any symptoms which might develop, such as ileus, resection would be good surgery, but in the circumstances under which we were working it was inadvisable. This brings out, too, the necessity for coordination between surgery and follow-up.

Next I want to bring up a chest injury. This man had a large wound in the chest around the axillary line about the region of the 4th or 5th rib on the right, and the projectile had traveled downward and may have been in the mediastinum, the lung, or in the diaphragm, somewhere in the lower part of the thoracic cacity. This was the type of wound described as "sucking," that is, air was passing in and out with each respiration, and with all the possibilities of disturbances of the mediastinum that take place under this condition. The treatment was as follows: The wound of entrance was debrided, at the same time maintaining a plug within the wound to prevent sucking. Then a tube 1 inch in diameter and long enough to reach to the floor was placed in the wound. It was fixed there by a succession of strips of adhesive tape around the tube in an elliptical way, one on top of the other, increasing in size until the wound was entirely shut off from the outside. The end of the tube was placed in a large bottle containing sterile fluid to cover the end. No attempt was made to explore the chest or to look for a foreign body, the object being to allow the lung to expand and prevent mediastinal shift. In these cases in massive hemorrhage within the pleural cavity, after closing the wound aspiration once, or repeatedly, may be necesary. I think that possibly something of added value in these cases would be, after having proceeded as above, to make a heavy suspension of the sulfa powder and inject it into the pleural cavity with a large needle through the tube. I believe that it might be of marked value in minimizing subsequent infection.

Another case I wish to speak of for special points was a wound in the sacral region. The projectile, a large shell fragment, had crashed in and amputated the lower end of the sacrum, as in a Kraske operation, and was imbedded in the tissues in front of it. This case was reached late in the first day. There was a history of his not having voided. A catheter was passed into the bladder and only a very small amount of urine was obtained, but there was no blood. The wound of entry was excised and opened up, the foreign body was located and removed, the wound was debrided and fragments of the sacrum were also removed. The question then arose whether the wound had penetrated sufficiently to injure the rectum and soil the peritoneal cavity anterior to it. It seemed to me unlikely, and I think that I would have done no more. However, Dr. Moorhead called for a new set of instruments, and opened this man suprapubically. Nothing was found within the peritoneal cavity. The peritoneum and the cul-de-sac about the rectum was ecchymotic. I mention that I might not have made this exploratory because possibly some of you might have taken the same attitude, and it is mentioned to stress the attitude of Dr. Moorhead in insisting on visualizing the peritoneal cavity in this case.

The next subject I am going to touch on is foreign bodies in the tissues, which were mostly shell fragments of various sizes. The procedure, of course, depended on the location and the tissues involved. If there were a large projectile in the tissues and the X-ray showed it, the procedure was to follow the wound down to the projectile, debriding all devitalized tissues down to it, and on reaching it the bed of the projectile was debrided. Unless the resulting wound was very shallow, particularly if the foreign body were nearer the surface elsewhere than at the entering site, a counter opening was made. The tract was well treated with sulfa powder, and then a vaseline strip was passed through it. This was not in any sense a pack, it would lie very loosely in the wound. In the first cases there was a little difficulty encountered in pushing the sulfa powder out as you pushed the vaseline strip in. So the method was devised of treating the vaseline strip on the surface with the sulfa powder so that it would carry it through with it.

No sutures were used to close the wounds. I may say that was an absolute rule. Occasionally sutures were placed and a bow knot tied in them

for subsequent tightening, but this was the exception rather than the rule.

I saw no burn cases at Tripler. The cases were practically all Army men from Hickam Field and vicinity. However, I understand that there were many burn cases at Pearl Harbor and they were taken to the Naval Hospital there.

Just from observations of the many abrasions and wounds, I formed an opinion as to the treatment of burns. It has no authority and little experience behind it. I believe that the procedure as far as the local condition is concerned would consist of thorough cleansing with soap and water, debriding of obviously devitalized tissues, drying, and the use of the sulfa powder thoroughly applied, over this a dressing of one thickness of vaseline gauze reinforced with plain gauze. This is based on seeing how quickly these wounds and abrasions treated thus became dry and ceased to secrete, with the prevention of infection.

* * * * *

To summarize: we have been discussing war surgery, and in these days civilians are almost equally involved. Your case today may be pushed along for the casualty of tomorrow, so you have no assurance of opportunity to follow up with advice or correct any omissions of today; therefore, complete and correct first treatment means saving of life and limb, and will greatly shorten the average hospitalization and disability.

To again briefly list the means:

(1) Treatment of general condition—shock, hemorrhage, et cetera.
(2) Investigation of wounds in all their possible extensions.
(3) Complete debriding.
(4) The efficient use of sulfa drugs, locally and by mouth.
(5) No suturing for closure.
(6) Vaseline gauze to keep wounds open, not for packs.
(7) Records to go definitely attached to the patient.

I can't close without mentioning the men who were "taking it." Most of them were lads in their twenties. Their attitude may be summed up in the words self-control and cooperation. They showed it in the quiet way they took an anesthetic, yes, and in the quiet way they came out of anesthetic. It greatly lightened the work, and without doubt improved their chances. They were admirable.

Dec. 20, 1941. S. R. Brown, M.D.

NOTES AND NEWS

DR. TADAO HATA, of Honolulu, has been certified by the American Board of Otolaryngology, having successfully completed the examinations of the Board while on the mainland last fall. He attended the meeting of the American Academy of Otolaryngology and Opthalmology in Chicago. His brother, DR. HERBERT C. HATA, has joined him in the practice of otolaryngology. The latter, a graduate of the College of Medical Evangelists in 1940, was recently honorably discharged from the Army as a Major, after serving for thirty-nine months in the Asiatic Theatre. He took a refresher course in otolaryngology at the University of Minnesota just prior to resuming practice.

DR. THOMAS H. MAEDA has returned to Honolulu to practice general surgery, after having been away from the Islands for seven years. During this time he studied graduate surgery at the University of Pennsylvania for one year, following which he was surgical resident for two years at the American Oncologic Hospital in Philadelphia. He was later surgical resident at the Hazelton (Pa.) State Hospital and for the past year has been chief surgeon at the Shamokin State Hospital. He was admitted to Fellowship in the American College of Surgeons in 1946. Dr. Maeda is located at 1048 S. Beretania Street.

DR. HOMER BENSON, of Honolulu, has returned from an extended mainland trip which included the meeting of International Post-Graduate Medical Assembly in St. Louis and a course at Cook County Hospital in Chicago. He also visited at the Mayo Clinic, Rochester, Minnesota and at his home in Richland Center, Wisconsin.

DR. LEON E. MERMOD, director of the Honolulu Blood Bank, delivered a paper before the meeting of the National Blood Bank Institute in Dallas, Texas. Dr. Mermod was elected vice president of the American Association of Blood Banks.

DR. ERIC FENNEL, pathologist at The Clinic and at Kapiolani Hospital, delivered a paper at Tripler Hospital before a meeting of Army medical officers, on the subject of "Three Nonspecific Laboratory Tests as Applied to Diagnosis and Prognosis."

DR. RALPH B. CLOWARD, of Honolulu, addressed the Harvey Cushing Society at their annual meeting in Virginia on the subject of "The Treatment of Ruptured Lumbar Discs by Intervertebral Fusion." Dr. Cloward was successful in having this society of neurosurgeons vote to hold its next meeting in Honolulu in August, 1948, in conjunction with the Pan-Pacific Surgical Congress.

DR. WAYNE W. WONG has opened an office in the Victoria Medical Building, Honolulu, for the practice of ophthalmology and plastic surgery. Dr. Wong is a native of Maui and was graduated from Rush Medical College in 1940. He interned at the Cook County Hospital, Chicago, following which he was a resident in ophthalmology there for two and a half years. He has been certified by the American Board of Ophthalmology in 1946. He was associated with Dr. W. B. Slaughter, plastic and oral surgeon at Loyola University Medical School, Chicago.

DR. HARRY L. ARNOLD, JR., spoke to the Hawaiian Botanical Society on January 5 on plant dermatitis in Hawaii.

DR. CHARLES A. WILBAR, JR., president of the Territorial Board of Health, has returned from attendance at the meeting of the State and Territorial Health Officers' Association, in Washington, D. C. He visited the Massachusetts and California Health Departments to learn, in particular, matters relative to their excellent cancer control programs. He states that Hawaii needs a more active program in this disease and that it must be carried out with cooperation between the County Medical Societies, the lay American Cancer Society and the Board of Health. It is expected that considerable progress will be made in this activity this year.

Another matter which he said is of considerable interest is the availability of the Virus Diagnostic Laboratory of the California State Health Department, in Berkeley, to Hawaii physicians. The laboratory tests for virus diseases are necessarily complex and it will be some time before they can be carried out locally. However for cases in which it is necessary to obtain help from the laboratory, arrangements can be made through the local Board of Health for shipment by air to Berkeley of the material for testing.

DR. WALLACE S. KAWAOKA has opened an office in the Victoria Medical Building, Honolulu, for the practice of ophthalmology. He is a graduate of Tulane University Medical School in 1937 and took an internship in Iowa and a general residency in Lynchburg, Virginia and later Ponca City, Oklahoma. After general practice in Lihue, Kauai for three years, he volunteered for the 442nd Combat Team and served overseas with them for two years as a Captain in the Medical Corps. Following discharge he served as a resident in ophthalmology for eighteen months at the Tulane Eye, Ear, Nose and Throat Hospital and later took graduate work at the New York Eye and Ear Hospital. Dr. Kawaoka is a native of Eleele, Kauai.

DR. EDWIN YOUNG, until recently a resident at the St. Francis Hospital, has left to serve in the Army Medical Corps and has been assigned to San Antonio, Texas.

DR. ALFRED H. F. LUI has opened an office for the practice of medicine and surgery in Kailua. He served as a resident at the St. Francis Hospital following his discharge from the Army Medical Corps as a Captain. He had spent one year in Japan in the Occupation Army. Dr. Lui graduated from the College of Medical Evangelists in 1945 and interned at the White Memorial Hospital in Los Angeles.

Dr. Corydon McA. Wassell has resigned as superintendent of the Shingle Memorial Hospital at Hoolehua, Molokai and has returned to his home in Little Rock, Arkansas.

Dr. John G. Lynn has been appointed director of the Mental Health Clinic of The Queen's Hospital and of the Territorial Board of Health. He is a graduate of the University of Maryland School of Medicine, in 1929, and has been chief psychiatrist of the Psychiatric Institute of Grasslands Hospital, Valhalla, New York, for the past three years prior to coming to Hawaii. He has been assistant attending neurologist at the Vanderbilt Clinic, in New York City, as well as a research associate in neurology at Columbia University College of Physicians and Surgeons. During this time he was also instructor in neuro-anatomy in the Columbia University Graduate School.

Dr. Lynn is a diplomate of the American Board of Psychiatry and Neurology, having been certified in 1940. He is also a member of a number of national psychiatric and neurological societies and is the author of many scientific articles in his specialty.

The Kuakini Hospital has a new resident physician on its staff, Dr. Fumiyo Sugimoto, a native of Wahiawa. She received her medical aducation at the Women's Medical College in Tokyo, from which she was graduated in 1940. She has spent six years in the Aiiki Research Institute of Pediatrics in Tokyo.

The Queen's Hospital has added two new residents to its house staff. Dr. Eleanor Green, of Brooklawn, New Jersey is serving a mixed medical residency. She was graduated from the University of Pennsylvania School of Medicine in 1945 and served for internship at the Philadelphia General Hospital for two years. Dr. Emmett Neil, of Gillette, Wyoming, is serving as mixed surgical resident. He is a graduate of Georgetown University Medical School in 1944 and interned at the St. Vincent's Hospital in Los Angeles. Following this he was a Captain in the Army Medical Corps.

Dr. Maximilian Obermayer, professor of dermatology in the University of Southern California Medical School, spent the last ten days of December at Hana and made a three-day visit to Kalaupapa in January. Dr. Obermayer is the junior author of Becker and Obermayer's "Modern Clinical Dermatology."

Dr. Dorothy Natsui has joined the staff of the Bureau of Mental Hygiene of the Health Department as acting child psychiatrist. Dr. Natsui recently returned from Johns Hopkins University Medical School where she took a year's work in child psychiatry. Prior to that time, she was at the Territorial Hospital for five years as hospital physician. After attending the University of Hawaii for a year, Dr. Natsui received both her bachelor's degree and her M.D. degree from Loyola University.

ISLAND OF KAUAI

Dr. and Mrs. Donald Chisholm, of the Samuel Mahelona Hospital, where Dr. Chisholm is medical director, have returned from a six month leave of absence in Philadelphia, Pa.

Dr. and Mrs. William Toney, of Kilauea, welcomed their second child, a girl, at the Wilcox Memorial Hospital, on October 30, 1947. She has been named Valerie.

Dr. Marvin Brennecke, of Waimea, has returned from an extensive automobile tour of various mainland medical centers for three months.

Dr. and Mrs. Jay Kuhns, of Lihue, have returned from a vacation in Oregon, where Dr. Kuhns did lots of fishing and hunting in the backwoods.

Dr. and Mrs. Patrick Cockett, of Lihue, have returned from the Plantation Physicians Convention on Hawaii.

ISLAND OF HAWAII

A Journal Club has been started at the Hilo Memorial Hospital under the direction of Dr. M. Gerundo. The club meets weekly on Tuesday evening and the meetings are open to all who wish to attend. Twelve physicians have volunteered to review current literature in their respective fields of medicine, each one to devote an evening to the presentation of significant articles.

A number of local physicians have taken mainland trips recently. They include Dr. R. S. Fillmore, of Kohala; Dr. C. L. Phillips, of Hilo; Dr. Archie Orenstein, of Hilo; Dr. C. B. Brown, of Hilo and Dr. E. S. Slaten, of Pahala.

Dr. H. D. Ireland has resigned from the staff of Puumaile Hospital for Tuberculosis and has accepted a position in a new sanatorium in Seattle, Washington.

Dr. C. Hayashi, of Hilo, recently returned from a vacation in Chicago. While he was away his practice was taken over by his brother, Dr. S. Hayashi, of Cleveland, Ohio.

Dr. R. M. Miyamoto has opened an office in Hilo for the practice of medicine and surgery. He is a graduate of Tulane University Medical School, in 1939, and interned and had a residency at St. Joseph Hospital, Joliet, Illinois. He served in the European Theatre as a Captain in the U. S. Army Medical Corps, and practiced in Joliet prior to his return to Hilo.

HONOLULU PEDIATRIC SOCIETY

This Society was organized in November and has drawn up a Constitution and By-Laws. It will meet every two months. Membership is divided into two groups, Active Members and Associate Members. Active Members are those who limit their practice to pediatrics, there being eight such members at this time. Associate Membership will be extended to those physicians interested in pediatrics who wish to attend the meetings.

The Society is under the presidenccy of Dr. Joseph Palma, of The Clinic, and Dr. Teruo Yoshina is the secretary. They have taken an old Hawaiian motto, "Hoola A Hoolu Lahui" originally credited to King Kalakaua.

MISSISSIPPI VALLEY MEDICAL SOCIETY 1948 ESSAY CONTEST

The Eighth Annual Essay Contest of the Mississippi Valley Medical Society will be held in 1948. The Society will offer a cash prize of $100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the

general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the Thirteenth Annual Meeting of the Mississippi Valley Medical Society to be held in Springfield, Ill., September 29, 30; October 1, 1948, the Society reserving the exclusive right to first publish the essay in its official publication—the *Mississippi Valley Medical Journal* (incorporating the *Radiological Review*). All contributions shall be typewritten in English in manuscript form, submitted in five copies, not to exceed 5,000 words, and must be received not later than May 1, 1948. The winning essay in the 1947 contest appears in the January 1948 issue of the *Mississippi Valley Medical Journal* (Quincy, Illinois).

Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

CALLING ATTENTION TO
Items of Possible Interest to Friends of Chauncey D. Leake

November, 1947

1. TOO MANY BOOKS? W. C. Halstead sensibly discusses *Brain and Intelligence* (Univ. Chicago Press, '47, 430 pp., $10). H. H. Anderson & Co. offer reference book on *Pharmacology and Experimental Therapeutics* for doctors, dentists, and vets. (Univ. California Press, Berkeley, '47, 370 pp., $6.50). F. A. Mettler edits Cecilia Mettler's *History of Medicine*, a reference work arranged by broad subject (Blakiston, Phila., '47, 1245 pp., $8.50). E. F. Adolph & Co. review *Physiology of Man in the Desert* (Interscience, N. Y., '47, 370 pp., $6.50). W. Dock and I. Snapper edit Vol. 2 of *Advances in Internal Medicine* (Interscience, N. Y., '47, 652 pp., $9.50). C. S. Venable and W. G. Stuck ably discuss *The Internal Fixation of Fractures* (Thomas, Springfield, Ill., '47, 241 pp., $5.50). D. E. Lea describes *Actions of Radiations on Living Cells* (MacMillan, '47, 402 pp., $4.50). S. A. Goudsmit in *Alsos*, pulls a cloak and dagger on tracing German science secrets (Schuman, N. Y., '47, 210 pp., $3.50). O Larsell gives the medical history of Oregon in *The Doctor in Oregon* (Oregon Hist. Soc., Portland, '47, 980 pp., $10). G. Murphy discusses *Personality: A Biosocial Approach to Origins and Structure* (Harper's, N. Y., '47, 1010 pp., $5). M. D. Kamen describes *Radioactive Tracers in Biology* (Academic, N. Y., 294 pp., $5.80). C. K. Drinker & Co. review *Psychiatric Research* at dedication of McLean Hospital Biochem. Lab. (Harvard Press, Cambridge, '47, 113 pp., $2). W. Weaver tells how *The Scientists Speak* (Boni, N. Y., '47, 382 pp., $3.75). G. H. Twombly edits *Symposium on Endocrinology of Neoplastic Diseases* (Oxford Press, N. Y., '47, 398 pp., $11). L. C. LeCron and J. Bordeaux describe *Hypnotism Today* (Grune & Stratton, N. Y., '47, 278 pp., $4). W. H. S. Jones translates and edits the medical writings of Menon, pupil of Aristotle (*Medical Writings of Anonymous Londinensis*, Cambridge Univ. Press, '47, 168 pp., 25 s), containing valuable note on nature of Greek medicine. Noteworthy for fine scholarship in M. H. Fisch's study of *Nicolaus Pol Doctor 1494* (H. Reichner, 34 E. 62nd St., N. Y., '47, 256 pp., $7.50). Excellent is the cooperative effort between E. A. Strecker, F. G. Ebaugh, our J. R. Ewalt and L. Kanner in *Practical Clinical Psychiatry* (6th ed., Blakiston, Phila., 486 pp., $5). E. J. Dingwall notes *Some Human Oddities: Studies in the Queer, the Uncanny, and the Fanatical* (Home, London, '47, 198 pp., 15s). J. Cyriax discusses *Rheumatism and Soft Tissue Injury* (Hamilton, London, '47, 406 pp., 42s). H. Gruneberg writes on *Animal Genetics and Medicine* (Hamilton, London, '47, 308 pp., 21s). F. W. Bancroft and C. Pilcher edit *Surgical Treatment of the Nervous System* (Lippincott, Phila., '47, 611 pp., $25). If your library doesn't have Beilstein, better order *Elsevir's Encyclopedia of Organic Chemistry* (Elsevir, N. Y., '47 plus, 20 vols., 38 parts, $6 per 100 pp.).

2. PHYSIOLOGICAL? P. D. McMaster indicates that a pressure gradient is significant in lymph formation in health and disease (*J. Exp. Med.* 86:293, '47). G. Malmstrom suggests standardized cardiological anoxemia test (*Acta Med. Scand. Suppl.* 195, '47, 103 pp.). W. R. Hess shows that diencephalon representation of autonomic function is not discretely delimited but diffuse, indicating broad co-ordination (*Suppl. 4 Helv. Physiol. Pharmacol. Acta* '47, 65 pp. and atlas). K. G. Stern describes nucleoproteins and gene structure (*Yale J. Biol. Med.*, 19:937, '47). J. A. Barclay & Co. emphasize secretion with filtration and reabsorption in kidney function (*Acta Med. Scand.* 128:500, '47). R. H. Orton confirms A. E. Guedel's claims (*Anesth. and Analg.* 13:263, '34) for controlled respiration in anesthesia (*Med. J. Austral.* 2:255, Aug. 30, '47). C. H. Kellaway discusses factors in liberation of histamine in tissue injury (*Edin Med. J.* 54:333, '47). A. Nilzen notes decrease in skin and blood histamine in urticarial outbreak (*Acta Dermat. Ven.* 27:Suppl. 17, 67 pp., '47). F. W. Clements' *Bancroft Oration* covers chronic malnutrition in children (*Med. J. Austral.* 2:225, Aug. 23, '47).

3. PHARMACOLOGICAL? M. Stacey & M. Webb discuss antibacterial action of bile acids and derivatives of cholane (*Proc. Roy. Soc. B.* 134:523, 538, '47). J. F. Fulton in commenting on Morton's ether demonstration, salutes the vision and daring of youth (*Anesth.* 8:464, '47). R. W. Gerard discusses anesthetics and cell metabolism (*Anesth.* 8:453, '47). S. Moeschlin surveys mechanism of urethane action in leukemia (*Helv. Med. Acta* 14:279, '47). J. F. Danielli & Co. describe "Bal-intray" (dithio propanol glucocide) as a non-toxic thiol for IV use in arsenical poisoning (*Biochem. J.* 41:325, '47—note many other reports on BAL in same issue). J. Boursuell & Co. describe use of radioactive isotopes in immunological studies (*Nature* 160:339, Sept. 6, '47). R. J. V. Pulvertaft well discusses air-borne infections (*Brit. Med. J.* 2:517, Oct. 4, '47). T. Francis reviews mechanisms of infection and immunity in virus diseases of man (*Bact. Rev.* 11:147, '47). N. F. MacLagan analyzes value of phosphatase and thymol turbidity tests in diagnosis of jaundice (*Brit. Med. J.* 2:197, Aug. 9, '47). S. E. Luria notes reactivation of irradiated bacteriophage by transfer of self-reproducing units (*Proc. Nat. Acad. Sci.* 33:253, '47).

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

BULLETIN COMMITTEE

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REPORT OF THE 51st ANNUAL CONVENTION OF THE NATIONAL LEAGUE OF NURSING EDUCATION

MRS. MILDRED PINNER, R.N., M.S.*

The fifty-first annual convention of the National League of Nursing Education was held in Seattle, Washington, September 7 to 11, 1947. Thirty-two State Leagues, and two representatives from Hawaii,† answered roll call. The audience seemed delighted with the idea of accepting Hawaii into the National League of Nursing Education.

Some revisions of the by-laws included: *Dues* (Article VIII) which were changed from $4.00 for the first year for new members to $5 for all active members. *Membership:* (Article I, Section 2-A). It was recommended that Article I, Section 2-a (1), (2), and (3) be eliminated and that eligibility for League membership be based upon the applicant's eligibility for state licensure. This recommendation was discussed but postponed for re-wording and consideration at the convention of 1948. *Regarding Article IV,* a request was made for re-interpretation of section 1-K and it was agreed that in processing applications, it would be the responsibility of the State and Local Leagues to accept new members upon the recommendations of the Committee on Eligibility in all cases except those presenting problems. Such cases are to be submitted to the Board of Directors of the State or Local Leagues.

Transfer of membership from one state league to another, or to and from headquarters, will be handled by headquarters entirely, and the transfer card used by state leagues eliminated.

Concerning payment of dues, if a member has paid dues for the current year before transferring to another state, membership will be recognized, a new card issued and full membership privileges granted without further payment of dues. If a member transfers before paying dues for the current year, payment will be made to the transfer district. Further, new members whose dues are paid in the last three months of the year will be carried as paid-up members for the following year. It was recommended that lapsed members re-instated after September first be carried over as paid-up members for the following year, but this recommendation was not passed.

The Council voted to dispense with history cards. However, they will be continued in the Territory of Hawaii because of the limited membership, and present position of the member will be included.

In the matter of dues, it was felt that state-wide programs should be carried on to make money for the various Leagues. The New Jersey State League has increased dues to $10.00 a year and in addition has raised funds by sponsoring fairs, hobby shows, and white elephant sales.

The responsibility of the state and local Leagues in organization and development of programs for practical nurses was discussed. It was agreed that the best programs were those under the direct supervision of graduate nurses. It was considered advisable for study groups to be formed to consider the various problems facing nursing education today in order to arrive at a common stand. This has been done to some extent. It was felt that another study group should be formed to consider faculty positions for schools of nursing.

The opening business meeting was held on Monday morning, September 8. All of the reports will appear as reprints in the Annual Report of the National League of Nursing Education. The Monday afternoon meeting considered the "Nursing School Library." Mrs. Emily C. Cardew,

* Director of Nursing Education, St. Francis Hospital School of Nursing, Honolulu; President (pro tem), Territory League of Nursing Education; Hawaii Delegate to NLNE Convention.

† Miss Virginia Jones, R.N., M.S., President, Nurses' Association Territory of Hawaii, second delegate to NLNE Convention.

Director of the Education Department, St. Luke's Hospital, presided.

The general session held at the Moore Theatre was open to the public. Miss Sleeper, President, presided. The invocation was given by Reverend Harold Small, President of Seattle College and the addresss of welcome by Elizabeth Smith, President of the Washington State League of Nursing Education. Dr. Raymond B. Allen, President of the University of Washington gave an address on "Health Sciences and Nursing Education." Following this the Mary Adelaide Nutting Award was presented to Miss Isabel Stewart for outstanding contributions in nursing. Miss Sleeper then accepted the Territory of Hawaii League of Nursing Education. The response was given and leis presented to Miss Sleeper, Miss Smith, Miss Mayo and Dr. Allen.

The Tuesday morning session was devoted to "Guidance Programs in Schools of Nursing." Phoebe Gordon of the University of Minnesota School of Nursing was the speaker. She pointed out that selection of students, health of students, faculty and staff consultations are three major factors in guidance programs. Also, that everyone in the hospital field is responsible for student guidance.

The nursing school budget was also discussed, with Miss Waagen, Hospital Nurse Consultant, as the main speaker. She advocated a separate budget for nursing service and the school. Maintenance is 2/3 of the costs of students. About 17 per cent of the cost of nursing education is paid by the student and 3 per cent by other sources.

During the afternoon session the film "Found in Hawaii" was shown to an audience of about 400. Later there was a round table discussion on "The Structure of National Nursing Organizations." It was brought out that through unity and more adequate support of our organizations, greatly improved nursing service should result. The League has been the leader in nursing education in all of its aspects. It was felt that lay participation is of great value and should be considered with regard to membership.

Part of the afternoon was devoted to "Administrative Problems in Guidance Programs" on which subject an excellent discussion was given by Sister John of the Cross. Sister Dolores Marie gave a report on testing programs to provide information on personality, aptitude and interest evaluations. The Wexler Bellevue Test, she feels, is the best individual test. She stressed the importance of religion in the education of our students as a basis for developing a life philosophy.

The evening session was concerned with "New Emphases in Public Relations," and Mrs. Elizabeth Soule of the University of Washington was presiding officer. A symposium on public relations and the school of nursing, with Miss Harriet Smith as chairman and H. G. Halstead, Washington State Director of Vocational Education, Edith B. Nelson, Washington State Employment Service, and Henrietta Doltz, Director of Department of Nursing, University of Oregon Medical School, participants, brought out the needs of public relations in schools of nursing as well as in nursing organizations.

The Wednesday morning session was devoted to student nurse recruitment programs. Miss Anna D. Wolf of Johns Hopkins presided. Miss Hocking, Coordinator of Women's Occupations in Seattle, spoke on "Blue Printing Careers." Mrs. Corrington, Nursing Specialist of the American Hospital Association, brought out the importance of recruitment to the nursing profession. In January 1947 there were 17 per cent fewer students in accredited schools of nursing. For lack of personnel, 23,000 hospital beds are no longer available to the public. While schools of nursing have been more selective in their students since January 1946, it is felt that in part decreased enrollment is due to lack of motivation. Interest in nursing must be stimulated. The Nursing Information Bureau should emphasize opportunities in nursing. Nursing is an expanding, growing profession and nurses must be responsible for selling their profession.

One meeting was devoted to recruitment techniques in local communities. The State of Iowa had on display a large number of posters that are used there in high schools and colleges. "Building and Understanding of the Curriculum within the School of Nursing" was discussed, with Miss Lorentz of Michael Reese Hospital, Chicago, presiding. Most of the discusion centered on the use of core studies. This method of instruction has been used in collegiate schools, but preparation of instructors is most important if it is to be well utilized.

Esther Brown, Ph.D., Director of the Study of Schools of Nursing, gave a progress report on the study, which has not yet been completed. The results are no different than anticipated from existing problems of schools of nursing at the present time, namely, a shortage of nurses, increased demand for nurses, lack of recruits, qualified personnel for faculty positions. Dr. Brown will undoubtedly have much help to offer for these problems at the completion of her study.

One of the most enjoyable events of the convention was the tea given by the Washington State

League of Nursing Education for the Board of Directors and Council of State Leagues on September 10 at the home of Mrs. Balmer on West Laurelhurst Drive. The Board of Trustees of the Children's Orthopedic Hospital served as hostesses. Many of those present have good friends in Hawaii.

The closing business meeting was held Thursday morning, September 11, and reports of the new officers given. President, Miss Ruth Sleeper; Vice-president, Miss Hazel Macquin; Secretary, Miss Loughrin; Treasurer, Miss Petry; new Directors, Miss Harrington, Mrs. Jensen, Miss Austin, Miss Heidgerken.

The President asked for an invitation for the next meeting, and since none was forthcoming, requested the various State Lagues to send their invitations to National Headquarters. The convention adjourned at 12:30 on September 11.

FEDERAL SECURITY AGENCY
U.S. Public Health Service
Washington, D. C.

September 11, 1947

Miss Virginia A. Jones
Mabel Smyth Memorial Building
Honolulu, Hawaii

Dear Miss Jones:

You will be pleased to know that the President of the United States has awarded to Mrs. Elmira Bears Wickenden, who served as Executive Secretary of the National Nursing Council for War Service, the Medal for Merit in recognition of her outstanding contribution to the war effort of our country. She is the first nurse and the third woman in the history of the United States to be so honored.

The Medal for Merit is a Presidential award to civilians for "exceptionally meritorious conduct in the performance of outstanding services to the war effort of the United States and of friendly nations." It is considered comparable to the Distinguished Service Medal for members of the armed forces. As you know, the Medal for Merit was established by George Washington in 1782.

At the President's direction, it is my great honor to present the award to Mrs. Wickenden. The ceremony is scheduled for Wednesday, September 17, 11 A.M., Washington, D. C.

Sincerely yours,

THOMAS PARRAN
Surgeon General

* * *

ELMIRA BEARS WICKENDEN, for exceptionally meritorious conduct in the performance of outstanding services to the United States from October, 1941 to December, 1946. Mrs. Wickenden, through her twenty-five years of experience and background in the field of nursing, pointed out to the Nation the need for a unified nursing profession in the effective prosecution of the war. Her superior organizing talent and energetic action led to the establishment of the Nursing Council on National Defense, which later became the National Nursing Council for War Service. As Executive Secretary of this organization, she coordinated the war-time programs of thirteen national organizations as they affected nursing service, and brought them to a realization of their part in maintaining the health and saving the lives of the armed forces and civilians. In addition to her efforts in helping to provide the record-breaking total of more than 100,000 nurse volunteers and more than 76,000 nurses actually assigned by the Army and Navy, she led the Council in taking the initial steps toward the establishment of the United States Cadet Nurse Corps, which enrolled 179,000 student nurses. She aided the nursing organizations to accelerate the procurement of personnel and the training of nurses when mobilization was at a critical stage, and the tremendous conversion of civilian population difficult. This contribution was an immeasurable one, and was possible only because of her profound insight into the needs of the Services and her vast knowledge of the potentialities of the nursing profession. Under her leadership, groundwork was laid for unified postwar action to provide adequate nursing service for the American people. As a result of her outstanding leadership in the field of nursing, she was appointed by the President as nurse advisor to the United States Delegation, World Health Organization, in June 1946. Mrs. Wickenden's conduct and achievements, her devotion to the cause of her county, and her complete disregard of personal gain reflect the highest credit upon herself, her profession, the Government and the people of the United States.

THE WHITE HOUSE
July 16, 1947

* * *

AMERICAN NURSES' ASSOCIATION

November 4, 1947

Miss Virginia A. Jones, President
Nurses' Association, Territory of Hawaii
510 South Beretania St.
Honolulu 53, Hawaii

Dear Miss Jones:

This will acknowledge receipt of your letter of October 21st in which you enclosed a bank draft in amount $357.50 (representing approximately 50 cents a member) which has been contributed by the Nurses' Association of the Territory of Hawaii for the rehabilitation of the American Nurses' Memorial Florence Nightingale School of Nursing, Bordeaux, France.

On behalf of the Committee I wish to take this opportunity to express deep appreciation for the interest and cooperation of the members of your Association in giving the Bordeaux School this financial assistance. It is indeed gratifying.

ELNORA E. THOMSON, R.N.
Chairman, Advisory Committee to the American Nurses' Memorial Florence Nightingale School of Nursing, Bordeaux, France

AMERICAN RED CROSS NURSING NEWS LETTER

National Staff Appointments

Ruth Freeman, administrator of Nursing Services, has announced a partial list of appointments to the staffs of national headquarters and area offices.

Ann Magnussen, director of nursing for the eight states of Southeastern Area, becomes director of disaster nursing and enrollment. Annabelle Petersen has been appointed assistant director of enrollment. In continuous Red Cross service since 1920, Miss Petersen has served until recently as assistant to the director of Nursing Services at national headquarters.

Eula B. Butzerin, formerly an educational consultant on home nursing, has been appointed assistant director of Home Nursing. Ellen L. Aird becomes educational consultant on home nursing after serving as training assistant in that program.

Ella B. Gimmestad, in Red Cross service for 18 years, has been appointed assistant director of nursing in charge of technical aspects of the nurse's aide program. For the past several years, she has held the post of nursing director on the Disaster Service staff.

Three area nursing staffs will have new directors September first, each with wide experience in Red Cross nursing programs. Jeanie Adkerson, former North Atlantic Area nursing director, New York, N. Y., assumes a similar assignment in the Southeastern Area Office, Atlanta, Ga. North Atlantic Area deputy director Frances Crouch is now the director of that area, which covers nine states.

Irene Thompson, deputy nursing director, Midwestern Area Office, St. Louis, Mo., has been appointed director of the Pacific Area Nursing Service, San Francisco, Calif., which includes eight states and Alaska. She succeeds Portia Irick, who has resigned to become director of Public Health Nursing in New Mexico.

Virginia Elliman and Lona Trott, both former members of the national headquarters nursing staff, continue as directors respectively of Eastern Area, covering seven states and the District of Columbia; and Midwestern Area, comprising 17 states.

Polio Scholarship Nurses Serving in Present Outbreaks

Red Cross chapters recruited 25 nurses beyond local resources for polio duty during the first three weeks in August. The requests were the first received by the organization for new 1947 cases and came from four widely separated sections of the United States. The majority of nurses recruited were experienced in polio care and were among those recommended for scholarships to the spring 1947 hospital training courses offered by the National Foundation for Infantile Paralysis. During the 1946 outbreaks of poliomyelitis, the Red Cross recruited 2,573 nurses beyond local resources. They were paid by the NFIP.

International Visitors Study Red Cross Programs

A group of international pediatricians, an Iranian princess directing social service in her country, and a Chinese nurse on an International Health Division fellowship, were among the visitors from abroad studying Red Cross nursing policies and procedures during August.

The doctors, representing 36 countries and their respective Red Cross societies, were in Washington for a week as guests of the Red Cross following the International Pediatrics Conference in New York City. All phases of Red Cross health and safety programs as well as Junior Red Cross educational programs were observed in the series of forum discussions.

Princess Ashraf Pahlavi, twin sister of Shah Mohamed Reza Pahlavi, ruler of Iran, spent two weeks in Washington at the invitation of the American Red Cross observing social welfare methods of public and private agencies. Director of Iran's new Imperial Social Service Organization, she hopes to develop needed orphanages, hospitals and clinics in her country. On her return to Iran, she will establish a school of nursing at Teheran. In the time spent at Red Cross national headquarters, she expressed particular interest in home nursing techniques.

Virginia Lu, supervisor of a municipal tuberculosis center in Nanking, China, spent a week in August observing Red Cross health programs and organization at national headquarters, in area offices and during chapter classes. She has had wide experience in the field of public health nursing in China.

Red Cross Nurses Invited to Apply for Return of Personal Papers in Enrollment Files

In the process of adapting its nurse enrollment program to peacetime needs, the American Red Cross plans to reduce the materials in the national nurse enrollment and recruitment files.

These files contain a variety of papers that the enrolled nurses may wish to have preserved. These include, in many instances, confidential work references, school of nursing credentials, birth certificates or other evidences of citizenship and other legal documents.

School of nursing credentials or other confidential work references cannot be released to the in-

dividual nurse, but may be turned over to any nurse placement agency or returned to the school of nursing. Other material that the nurses desire will be returned to them. The Red Cross is urging that nurses make prompt request for its return.

Army nurses who served in World War II need not request material to be returned inasmuch as this data has been transferred to the Army Nurse Corps for their permanent files. Personal data of navy nurses of World War II may be returned on request to Red Cross. Confidential material has been sent to the Navy Nurse Corps files.

Requests for the return of material should be addressed to Ruth B. Freeman, Administrator, Nursing Services, American National Red Cross, Washington 13, D. C.

Historic material concerning the Red Cross Nurse Enrollment Service and the files of individuals prominent in general nursing and Red Cross nursing will be retained in the Red Cross archives.

NURSING CARE STUDY OF A PULMONARY TUBERCULOSIS PATIENT

Emiko Kinjo*

Mr. C. particularly interested me because I had known him as a patient at Kuakini Hospital before he was admitted to Leahi Hospital with the diagnosis of advanced pulmonary tuberculosis. He had previously been admitted to Kuakini Hospital to have an appendectomy performed under local anesthesia. Since this was an uncommon occurrence in our surgery I wondered why this type of anesthetic was chosen. Since coming to Leahi I have learned that Mr. C. might (under general anesthesia) have suffered respiratory embarrassment during surgery due to the weakened condition of his lungs. He might also have spread the infection throughout his lung tissues by aspiration of infected material to unaffected parts, had he been given a general anesthetic.

Mr. C. is a young Japanese man of modest and solemn nature, and has become one of the most cooperative patients in the ward. He was raised in a plantation home on the island of Hawaii in a family which consisted of his parents, his two brothers and himself. His educational opportunities were neglected because of ignorance and lack of interest on the part of his parents, so Mr. C. left school after completing only the seventh grade. To satisfy his parents he worked on the plantation as a laborer. Although there was no actual financial difficulty there was little money for other than the necessities of life. In addition there was turmoil and instability in the family environment and finally his mother divorced his father.

At the age of nineteen Mr. C. left his unhappy home to seek adventure and a better occupation and made Honolulu his choice. At Schofield he secured a position as a clerk and remained there for two years. Unfavorable as his home situation had been, he found in his new environment little improvement. He adjusted to his independence and to city life with great difficulty. At the end of two years he changed his occupation to that of "fry cook" and for the next three years his working conditions were most unpleasant. In a constant atmosphere of penetrating heat and smoke and the perpetual sight and odor of food, it is not surprising that Mr. C. suffered from anorexia or loss of appetite. Like most young men he craved soda pop, sweets and steaks and soon his meals became "snacks." Discipline in good dietary habits had been sadly neglected during his childhood and he could not realize that the lack of fruits, milk and vegetables would be a predisposing cause toward the dreadful diagnosis of tuberculosis. These foods, so necessary to the maintenance of body repair and growth, are also essential as a factor in building up resistance against disease.

Another vital factor which was to play an important role in undermining Mr. C.'s health was the matter of rest. By rest we mean sleep, and our young patient in his pursuit of pleasure and adventure was frequently limiting his daily rest to 3 or 4 hours of "naps" and "snoozes."

Although Mr. C. did not recognize as unusual his failing appetite, and the fatigue he attributed to lack of sleep, we can readily see that he already manifested two clinical symptoms of tuberculosis. He was depressed mentally and he had not adjusted easily from plantation life to life in the congested area of Honolulu. His dietary habits were bad and his rest routine faulty. Many of his friends lived in similar conditions and he was not alarmed because he was not feeling up to par.

In 1945, during the course of draft induction, Mr. C. had an x-ray of his chest and a diagnosis of arrested tuberculosis was made. This means that tubercle bacilli had invaded his lung tissues and, because of his lowered body resistance, had secured a small foothold before they had been walled off by his decreased body defenses. Such lesions are readily apparent to the radiologist who is expert in the reading of chest x-rays.

Mr. C. was referred to the Rehabilitation Unit in the Territorial Armory and was alarmed by the request to report monthly to the Lanakila Chest Clinic. He had no chest pain, he did not cough and he had had no hemorrhages. Only the explanation of his x-ray films convinced him that he was indeed a victim of the dreaded tuberculosis.

At this time the lesion in his chest was small and it is not unusual that clinical symptoms were not manifested. Mr. C. had only minimal lesions in the first intercostal space of the right lung and in the second intercostal space of the left lung. Early in 1946, however, symptoms of coughing, undue fatigue and slight fever became apparent. X-ray now showed considerable spread of the tuberculosis lesion in the right upper lobe and a contralateral spread in the left lung extending to the fourth intercostal space. Tests of gastric washings which had been negative up to this time now became positive for the tubercle bacillus. This indicated that Mr. C.'s lesion was exudative and as a result his cough became productive. Sputum contained the tubercle bacilli and necrotic material.

In February, 1946, Mr. C. had an attack of acute pain in the right lower quadrant and although he was on the waiting list for Leahi, he was admitted to Kuakini General Hospital. Here his appendix was removed under local anesthesia. On the second post-operative day he suffered a small hemoptysis accompanied by chest pain. This occurrence can be explained by the fact that hemorrhage in tuberculosis is due to the break-down of blood

* Student Nurse at Kuakini General Hospital.

This nursing care study was prepared by Miss Kinjo during her student affiliation at Leahi Hospital. It demonstrates a typical patient with pulmonary tuberculosis.

vessels in lung tissue and often follows sudden exertion such as coughing or exercise. In our patient, considerable coughing was experienced after his operation and he had frequent night sweats.

After six days he was transferred to Leahi Hospital where regular post-operative care was given. On his second day at Leahi Hosptal some diarrhea was noticed and bismuth and paregoric, drams one, were administered. He was carefully watched for the possibility of a tuberculous peritonitis or any indication of infection of the gastro intestinal tract. This is a serious complication and may result from swallowing of sputum which contains tubercle bacilli. Fortunately the diarrhea cleared up in a few days and our patient began to feel better both mentally and physically.

After six months of bed rest and routine tuberculosis nursing care, Mr. C. had no complaints of chest pain or discomfort. He was still coughing and his expectoration consisted of about 2 ounces of mucopurulent material daily. His diagnosis was pulmonary tuberculosis, active and moderately advanced, and of caseous, pneumonic nature. This type of tuberculosis results when infectious material is spread throughout the lung tissue from a smaller lesion. An acute inflammatory condition or pneumonitis may result or cavities may form. Sometimes the tubercles are so closely united that they appear homogeneous in character and the term "caseous" is used to describe the cheesy appearance. Healing of tuberculosis lesions may be accomplished by several distinct mechanisms. Active inflammatory lesions may undergo resolution, the resolved exudate disappearing through absorption, or by means of expectoration. Caseo-necrotic lesions absorb slowly and slightly, if at all. If the cheesy material undergoes liquefaction and absorption, cavities form in the lung tissue. When these necrotic lesions are small they may dry out slowly leaving a fibrinous capsule. In Mr. C.'s case, the diseased areas of tissue were extensive and involved both lungs. For these reasons surgery was contraindicated. Healing must take place slowly and this could be accomplished only through building up body resistance and maintaining a rigid rest routine.

Careful and attentive tuberculosis nursing care was required, and mental reassurance was vitally necessary to secure Mr. C.'s cooperation. He could not understand, in the early weeks following his operation, why he was required to conserve his strength by eliminating all exercise when he felt so well. After careful explanation of the nature of his illness, he became most cooperative. He now realizes that sleep, a good diet, freedom from worry and excitement and rest are essential to his recovery. The family emotional conflict which surrounded him in his youth does not now disturb him. Because of his social and economic status, he has been accepted as a free-clinic patient and has been freed from the problem of financial worry. He enjoys his meals and the light recreation of reading and listening to the radio programs provided. Above all he is anxious to speed his recovery by following the instructions of his physician.

Mr. C. is very careful in the matter of "tissue technique," although he had to be carefully instructed on admission. Because of the highly infectious nature of his expectoration it was explained to him that he must cover his mouth and nose while talking, sneezing or coughing, and must at all times protect from infection those who are trying to aid him in his recovery.

By studying this patient having pulmonary tuberculosis, I have learned much regarding the disease itself. I have learned also to regard the patient as an individual and as having individual problems, needs and characteristics. Through actual experience with a patient I have learned the necessity of adequate and intelligent nursing procedures and the value of a successful psychological technique.

After learning that the cost of hospitalizing one pulmonary tuberculosis patient is estimated at about $1,800 per year, excluding the cost of treatments and medication, I have been impressed by the financial problem this disease presents. It is only by intelligent care of, and instruction to, the tuberculosis patient and his family that this dreadful disease can be eliminated from the community.

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* * *

HAWAII COUNTY NURSES

Miss Pollock, who has spent 14 years in YWCA work in China, and is now associated with the Hilo YWCA, gave an interesting lecture on rural health in China at the November meeting of the Nurses' Association. The lecture was illustrated with many excellent pictures.

One of the charter members of the Hawaii County Nurses' Association, *Mrs. Lizzie Nicol*, is now retired and living in England. As a Christmas gift the Association voted to send her a CARE package. Miss Jean MacDonald was instrumental in collecting clothing to send her also. We know Mrs. Nicol will find many in England who will welcome an extra garment or two.

VACATION ITEMS: *Mrs. Thelma Patten* left on November 9 by plane for an indefinite visit with relatives in Connecticut. *Miss Annette Hammersland* spent two weeks in Honolulu. Her niece from Iowa arrived in time for the Aloha Week celebration and returned to Hilo to spend several months with Miss Hammersland. *Miss Winifred Golly* of the Board of Health has been in Honolulu for a week on a combined business and pleasure trip. *Mrs. Katherine Burso* of Puumaile is spending two weeks in Honolulu as the guest of her son Dr. A. Burso. *Miss Ellen Renshaw* has just returned from a two-month trip to the mainland and is back on duty as night supervisor at Puumaile. After a year in the islands, *Miss Joan Freyereisen* and *Miss Ruth Murphy* have returned to their homes on the mainland. They were employed at Puumaile. *Miss Agnes De Vries* and *Miss Tomasek* recently joined the staff of Pahala Hospital. *Miss Florence Terry* of Seattle, Washington, is a new member of the Puumaile Hospital staff, as is also *Mrs. Barcelona* who has been at Pepeekeo Hospital during the past year.

CITY AND COUNTY OF HONOLULU

Children's Hospital

New staff nurses:

Eileen Millar (Evanston Hospital, Illinois)
Virginia Morrison (St. Luke's Hospital, Missouri)
Ruth Yamanaka (Queen's Hospital, Honolulu)
Carol Gill (Children's Hospital School of Nursing, Denver)
Francesca Kehlor (Hospital of Good Samaritan, Los Angeles)
Eunice Wade (St. Joseph's Hospital, Minnesota)
Lois Prothero (Hospital of Good Samaritan, Los Angeles)
Isabel Medeiros (Bethesda Hospital, Ohio)
Naomi Febre (Morningside Hospital, Oklahoma)
Dorothy Lukowski (Mercy Hospital School of Nursing, Ohio)
Elsie Shawver (St. Anthony's School of Nursing, Oklahoma)
Mildred Stallings (San Diego County, California)
Carolyn Zeller (Queen of the Angels College of Nursing, Los Angeles)
Helen Rice (Providence Division of School of Nursing Education of Catholic University of America, Washington, D. C.)
Jane Tugend (Edward J. Meyer Memorial Hospital, New York)
Betty Nugent (Methodist Hospital School of Nursing, Indianapolis)
Faye Golden (Methodist Hospital School of Nursing, Indianapolis)
Bernadeen Patrick (Methodist Hospital School of Nursing, Indianapolis)
Hermina Eiteljorge (Methodist Hospital School of Nursing, Indianapolis)

Kapiolani Maternity and Gynecological Hospital

A halloween party was held by the staff nurses at the Nurses' Home on October 31. The affair was well attended and enjoyed by all.

Misses Audrey Scales, Marie Rollo, Verdi Spinken, and Molly Matsuoka were honored at a farewell dinner recently. All four left for the mainland. Others who left the staff recently were Misses Elizabeth Vicary, Margaret Bloom, Katherine Avill, Maxine Howard and Arlene Albi.

Mrs. Agnes Planap, night supervisor, returned to her position after spending six months touring the mainland with her husband.

Many newcomers to the Nursing Staff have been welcomed recently:

Hisae Shiraki (Queen's Hospital, Honolulu) has returned after taking graduate work at the Margaret Hague Maternity Hospital, New Jersey
Fannie Lou Parker (University of Maryland School of Nursing, North Carolina)
Bernice Lillie (St. Peter's Hospital, Minnesota)
Ethel Van Sickle (Newman County Hospital, Kansas)
Beverly Warner (St. Mary's College of Nursing, California)
Faye Swan (Stanford University Hospital, California)
Onalee Sheaffer (Baptist State Hospital, Arkansas)
Clara Seibold (Providence Hospital, Washington)
Jeanette McGinley (St. Paul School of Nursing, Minnesota)
Phyllis Marnie (Los Angeles General Hospital, California)
Anne Lutz (University Hospital of Baltimore, Maryland)
Leila Weitz (Franklin Hospital, California)
Pauline Land (Christian Welfare Hospital, Illinois)
June Long (St. Patrick Hospital, Montana)
Margaret Jahn (Swedish Hospital, Washington)
Bessie Kondo (Queen's Hospital, Honolulu)
Barbara Muronaka (St. Francis Hospital, Honolulu)
Joanne Healy (Mercy College of Nursing, California)
Arlysa Helen Wescher (Milwaukee County Hospital, Wisconsin)
Margaret Harshman (University Hospital of Baltimore, Maryland)
Beth Hankammer (Lutheran Hospital, Ohio)
Jean Guthrie (Glenvale Hospital, Ohio)
Virginia Goyette (Mercy College of Nursing, California)
Lois Firestone (Bishop Johnson College of Nursing, California)
Gladys Evenson (Kahler School of Nursing, Minnesota)
Rebecca Enghoron (Mrs.) (St. Lawrence School of Nursing, Michigan)
Mary E. Brown (Mrs.) (Knapp College of Nursing, California)
Dorothy Jean Tassey (Bishop Johnson College of Nursing, California)

Leahi Hospital

A family study conference was presented by seven affiliating student nurses in the Leahi classroom on Monday, October 27. The students from St. Francis and Kuakini Schools of Nursing climaxed a two-month course in tuberculosis nursing by preparing this conference under the guidance of Miss Elsie Ho. The patient was selected from a ward to which all the students had been assigned for clinical experience so that they all had an opportunity to become acquainted with this tuberculous patient and his family.

Objectives for student participation in such a family study are to given an understanding of:

1. The tuberculous patient as an individual, a member of a family, and a member of the community from which he came and to which he will return.
2. The emotional and psychological problems associated with tuberculosis.
3. The health, social and economic factors associated with tuberculosis.
4. The importance of the tuberculosis hospital as an integral part of the community in the tuberculosis control program.

Areas covered by such a family study include a brief discussion of etiology, mode of transmission, epidemiology, familial and racial susceptibility, symptoms, diagnosis, treatment and social, emotional, medical and nursing problems of the tuberculous patient and his family. Much emphasis is placed on the role of health education in a tuberculosis control program.

The students prepare a variety of illustrative material to make these conferences interesting and informative. At the recent conference, a diet poster and diet manual, diagrams and x-rays showing types of collapse therapy used at Leahi, and National Tuberculosis Association literature were used.

Twenty-one visitors from the staffs of Leahi, Kuakini, St. Francis and the Board of Health attended the family study conference.

New graduate nurses on Leahi staff are:

Nadine Marie Carpenter (Youngstown Hospital, Ohio)
Lourdes Zambori (St. Louis City Hospital, Missouri)

Irene Markovitz (Atlantic City Hospital, New Jersey)
Evelyn Rud (Norwegian American Hospital, Illinois)
Helen Clifford (Mercy Central School of Nursing, Michigan)
Tamie Oka (St. Francis Hospital, Honolulu)
Doris Shiroma (St. Francis Hospital, Honolulu)

Leahi Hospital was happy to welcome back two former students who are now on the graduate staff. Miss Oka was an affiliating student in March-April 1946 and Miss Shiroma was a graduate student in the October class. The latter has just completed a year's service at Mahelona Hospital, Kauai.

St. Francis Hospital

The following graduate nurses became members of the nursing staff in October:

Ruby M. Beatty (St. Joseph's School of Nursing, Washington)
Delores Claire Blankenfeld (Merritt Hospital, California)
Jeanne B. Hillen (Mounds Midway School of Nursing, Minnesota)
Eve Florence Kapp (St. Joseph's Hospital School of Nursing, Washington)
Helen Donair McGillivray (Queen of the Angels College of Nursing, California)
Alice Marie O'Brien (St. Joseph's Hospital, Minnesota)

Two of the graduates of St. Francis Hospital became staff members in November after several months on duty in mainland hospitals. Miss Jeanette Seo who has had post-graduate study at Marquette University, will become supervisor in pediatrics at St. Francis Hospital. Miss Satsuko Kawamoto will resume her duties in the obstetrical division. For the past several months she has been at St. Joseph's Hospital in Milwaukee, Wisconsin.

Queen's Hospital

The Alumnae Association held its annual homecoming on November 29 at the Harkness Nurses' Home. Luncheon was served by the hospital and the affair was well attended. Miss Sadie Ching, Chairman, worked with the following committee members: Reception, Mrs. Patricia Anderson; publicity, Myra Lam; food and decorations, Miss Tamae Takaue; program, Miss Elsie Ho; clean-up, Mrs. Flora Ozaki.

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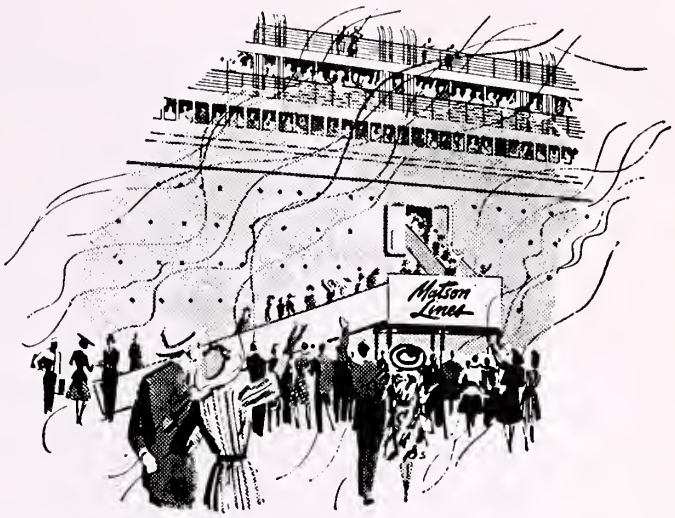
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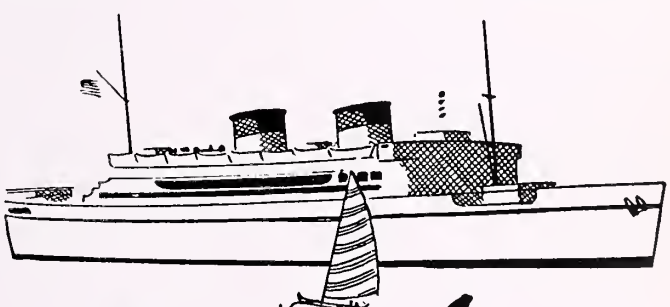
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1. Lennox, W. G. (1947), Tridione in the Treatment of Epilepsy, J. Amer. Med. Assn., 134:138, May 10. 2. DeJong, R. N. (1946), Further Observations on the Use of Tridione in the Control of Psychomotor Attacks, Am. J. Psychiat., 103:162, Sept.

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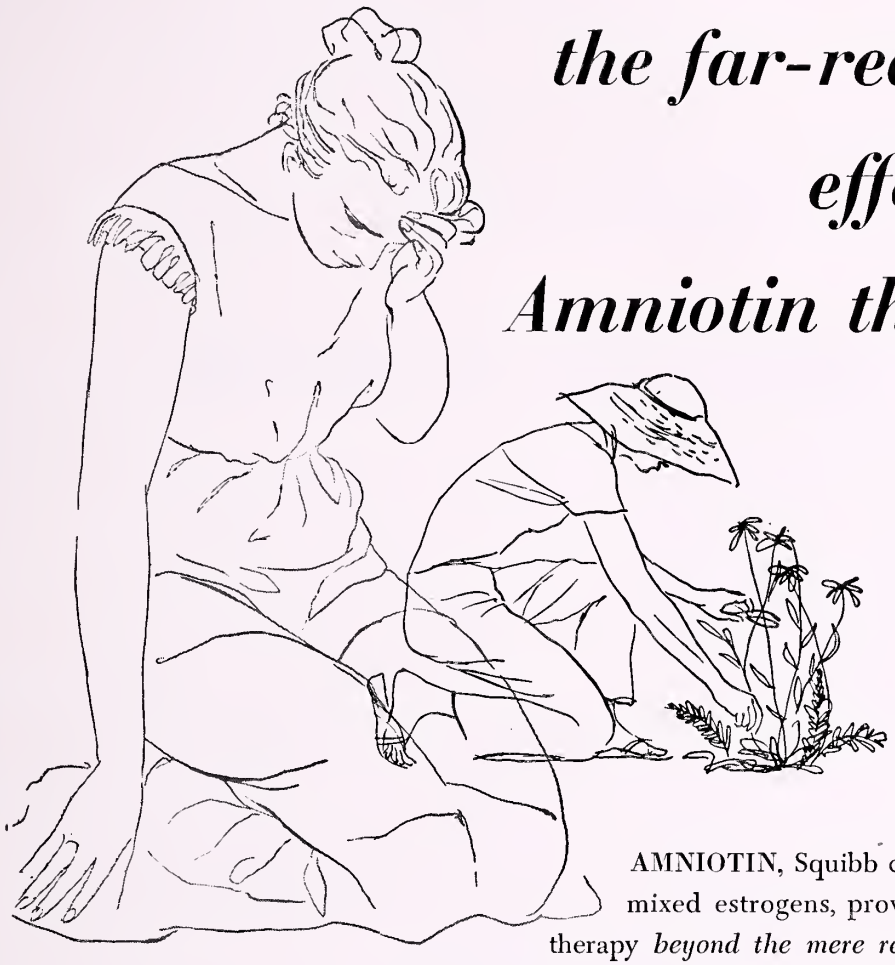
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Three servings daily of Ovaltine, each made of
½ oz. of Ovaltine and 8 oz. of whole milk,* provide:

CALORIES	669	VITAMIN A	3000 I.U.
PROTEIN	32.1 Gm.	VITAMIN B_1	1.16 mg.
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CARBOHYDRATE	64.8 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN D	417 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reported values for milk.

the far-reaching effects of Amniotin therapy



AMNIOTIN, Squibb complex of natural mixed estrogens, provides menopausal therapy *beyond the mere relief of vasomotor symptoms*. Amniotin does *more* than relieve climacteric flushes and sweating. The patient experiences a heightened feeling of well-being, improved strength and vigor, and "a greater sense of general relief, exclusive of the amelioration of hot flashes".[1] These are advantages attributed by many investigators to natural estrogen therapy.

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SQUIBB *complex of natural mixed estrogens*

1. J. Clin. Endo. 3:89 (Feb.) 1943.

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While sodium estrone sulfate is the principal estrogen in **"Premarin,"** *other equine estrogens...estradiol, equilin, equilenin, hippulin... are probably also present in varying amounts as water soluble conjugates.*

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with diluent, containing FOLVITE Folic Acid	3.0 mg

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Rachitic changes were present as late as the fourteenth year, and the incidence was higher among children dying from acute disease than in those dying of chronic disease.

The authors conclude, "We doubt if slight degrees of rickets, such as we found in many of our children, interfere with health and development, but our studies as a whole afford reason to prolong administration of vitamin D to the age limit of our study, the fourteenth year, and especially indicate the necessity to suspect and to take the necessary measures to guard against rickets in sick children."

*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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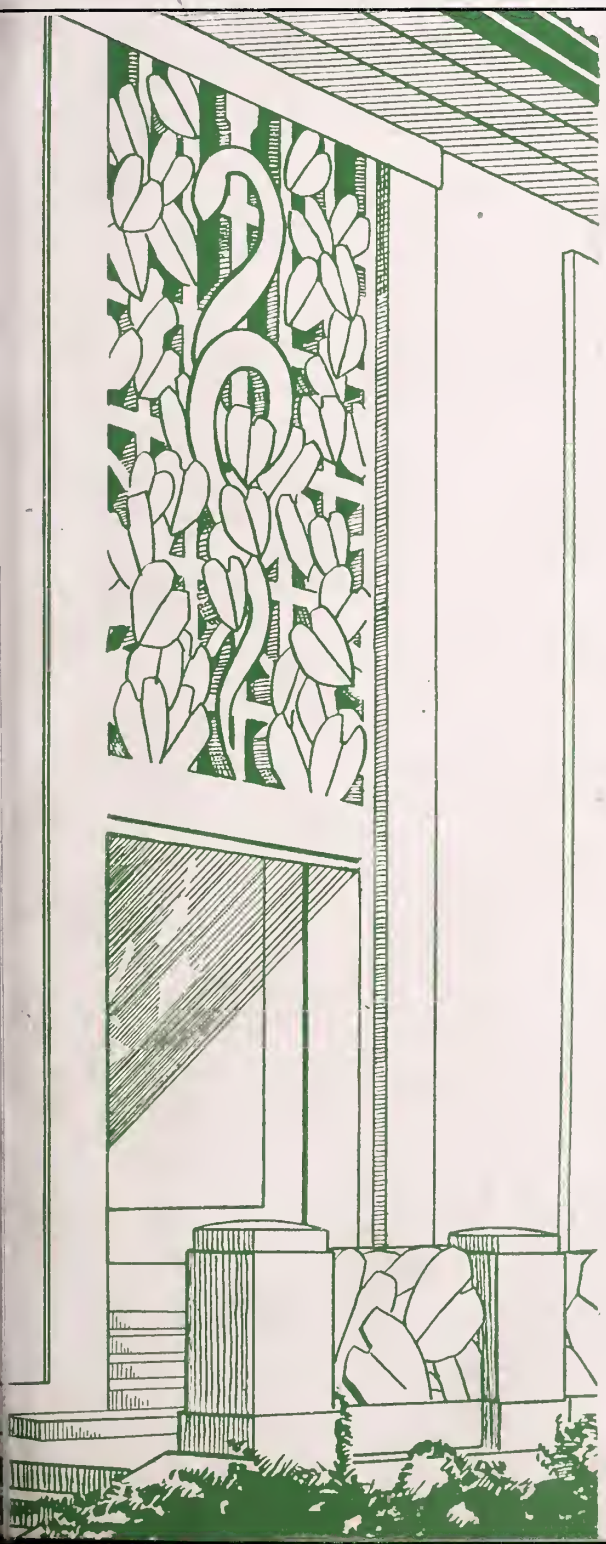
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HAWAII MEDICAL JOURNAL

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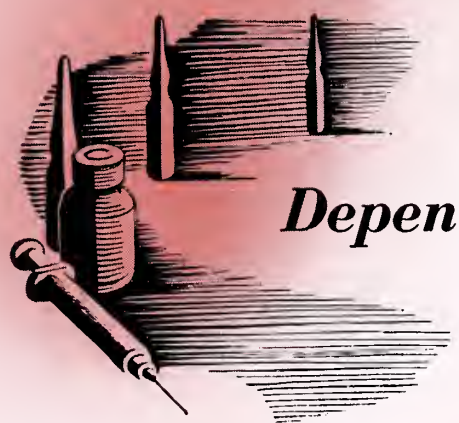
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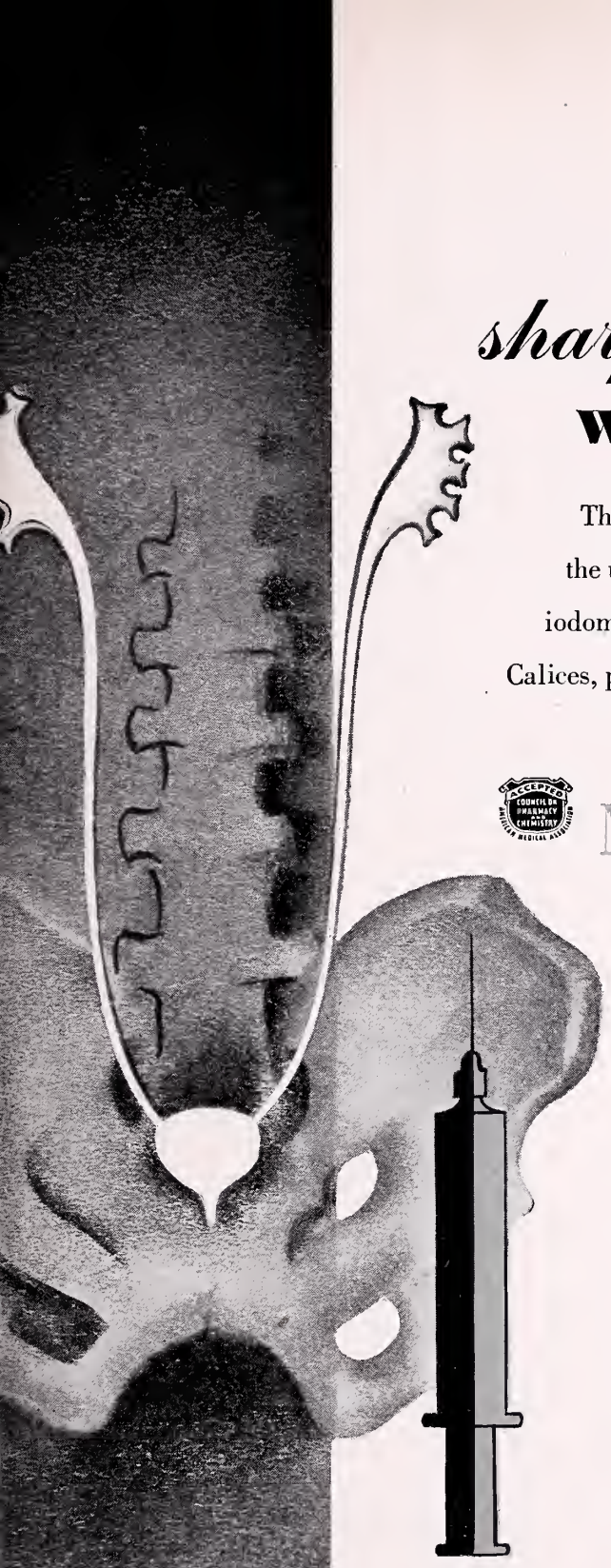
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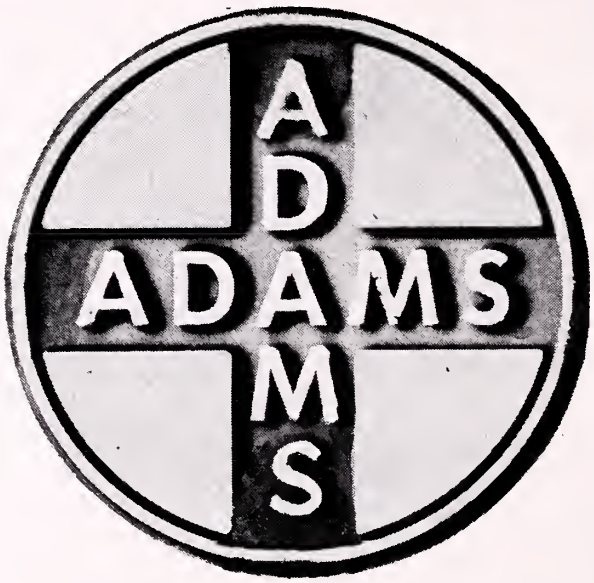
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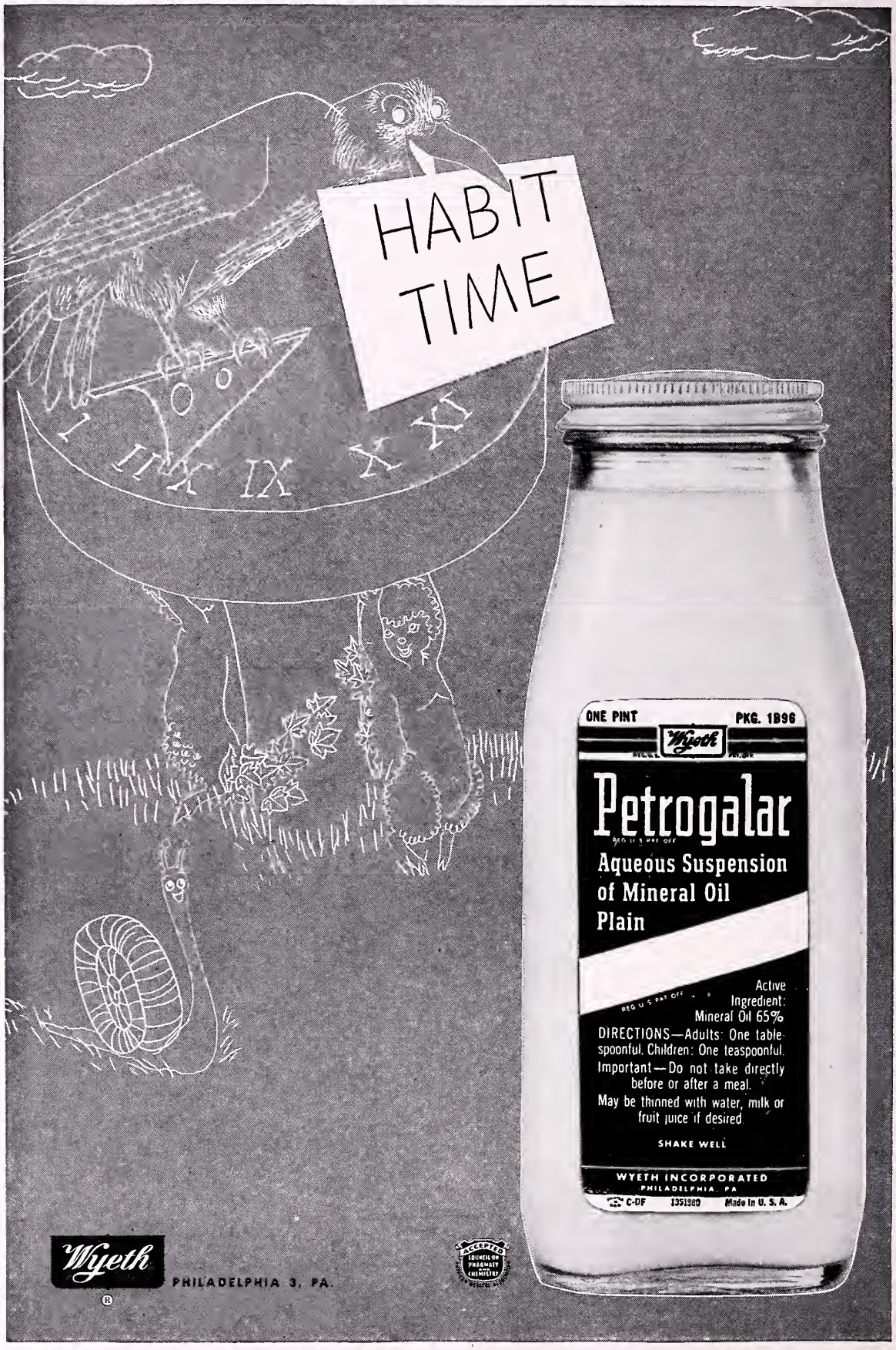
*Vital Statistics—Special Reports: Vol. 25, No. 12, National Office of Vital Statistics, Washington, D. C. (Oct. 15) 1946, p. 206.

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Four packages of penicillin tablets were recently returned to the Squibb Laboratories. They had been watersoaked to a point of partial disintegration. The outside and inside of the packages were covered with mold – they had been "through the mill". Furthermore, the tablets were outdated by four months.

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"the knife"

and the fork

"... the physiological state of the patient affects the mortality and morbidity of surgical practice as much or more than the correctness or skillfulness of that practice."[1] For that reason the fork must share with the scalpel the responsibility of favorable prognosis. The food the patient eats contributes greatly to the outcome of an operation. Faulty diet and a resultant avitaminosis make surgery more hazardous and impede recovery. For pre- or postoperative supplementation and therapy, Upjohn vitamins afford a full range of high-potency oral and parenteral formulas.

1. Surg., Gynec. and Obst **74**:390 (Feb. 16) 1942

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Osteomyelitis associated with compound fracture
Secondary infections following dermatophytoses

*Snyder, M. L., Kiehn, C. L. & Christopherson, J. W., Mil. Surg. 97:380, 1945.

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Some things you should know about operations

No. 210 in a series of messages from Parke, Davis & Co. on the importance of prompt and proper medical care.



OF ALL THE RECENT ADVANCES in medical science none have been more dramatic than those in surgery and the fields related to it. Take appendicitis, for instance.

Not very many years ago, having your appendix out might have meant a fairly long and uncomfortable hospital sojourn, followed by several tedious weeks of getting back your strength. And with it all you might have had good reason to fear such complications as peritonitis or pneumonia.

Nowadays, except for a few rare cases, the removal of an appendix is not considered a serious operation. And many operations which were considered of major seriousness as recently as 1930 are now often relatively simple.

Because of notable advances in training and surgical skill, many of the risks have been almost eliminated. Complications following operations are far less common. And most patients recover in a shorter time, and with less discomfort than formerly.

Such progress in surgery has been hastened by significant developments in four important fields.

1. Anesthesia. The administration of anesthetics has become a specialized science. New anesthetics have been developed—less toxic, less upsetting to respiration and heart action. With modern anesthesia the patient has a far easier time when undergoing surgery. Post-operative nausea and vomiting, which were previously almost taken for granted, are now much less frequent.

2. Infection-fighting drugs. Peritonitis, once feared as a frequent complication of abdominal surgery, today is uncommon. The use of such agents as the sulfa drugs and penicillin—to treat infection or to guard against it—has almost eliminated many of the infections which formerly constituted the greatest dangers in surgical procedures.

3. Early ambulation. Doctors have found that getting patients out of bed soon after operations not only speeds recovery, but also prevents many of the discomforts formerly suffered. Bowel and urinary functions are quickly restored. Gas pains are usually avoided. It is not unusual nowadays for a patient to be well enough to go home from the hospital in less than ten days after a major operation.

4. Body Nutrition. One of the problems in surgery has been that the condition which makes an operation necessary is usually one which has depleted the patient's nutritional reserves, and therefore lessens his ability to recover promptly from the operation itself.

In recent years, however, medical science has broadened its knowledge of body nutrition.

Today, it is possible to determine in what a patient's body is deficient—whether he needs whole blood, vitamins, salts, carbohydrates, protein.

Each of these elements can be replaced—making it far easier for the patient to go through an operation. Post-operatively, also, recovery is hastened by supplying the body's needs in easily assimilated form.

SEE YOUR DOCTOR. Give him your complete confidence at all times. If he advises an operation, follow his recommendation promptly. With modern surgery, with modern hospital care, you have little reason to be afraid.

Remember, too, that when surgery is indicated, a delay may be dangerous. Prompt action is likely to give you a quicker recovery—and an easier one!

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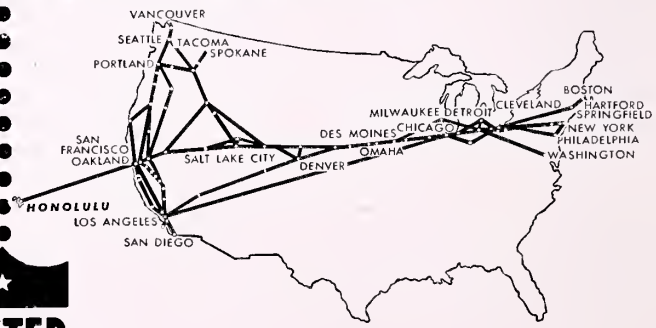
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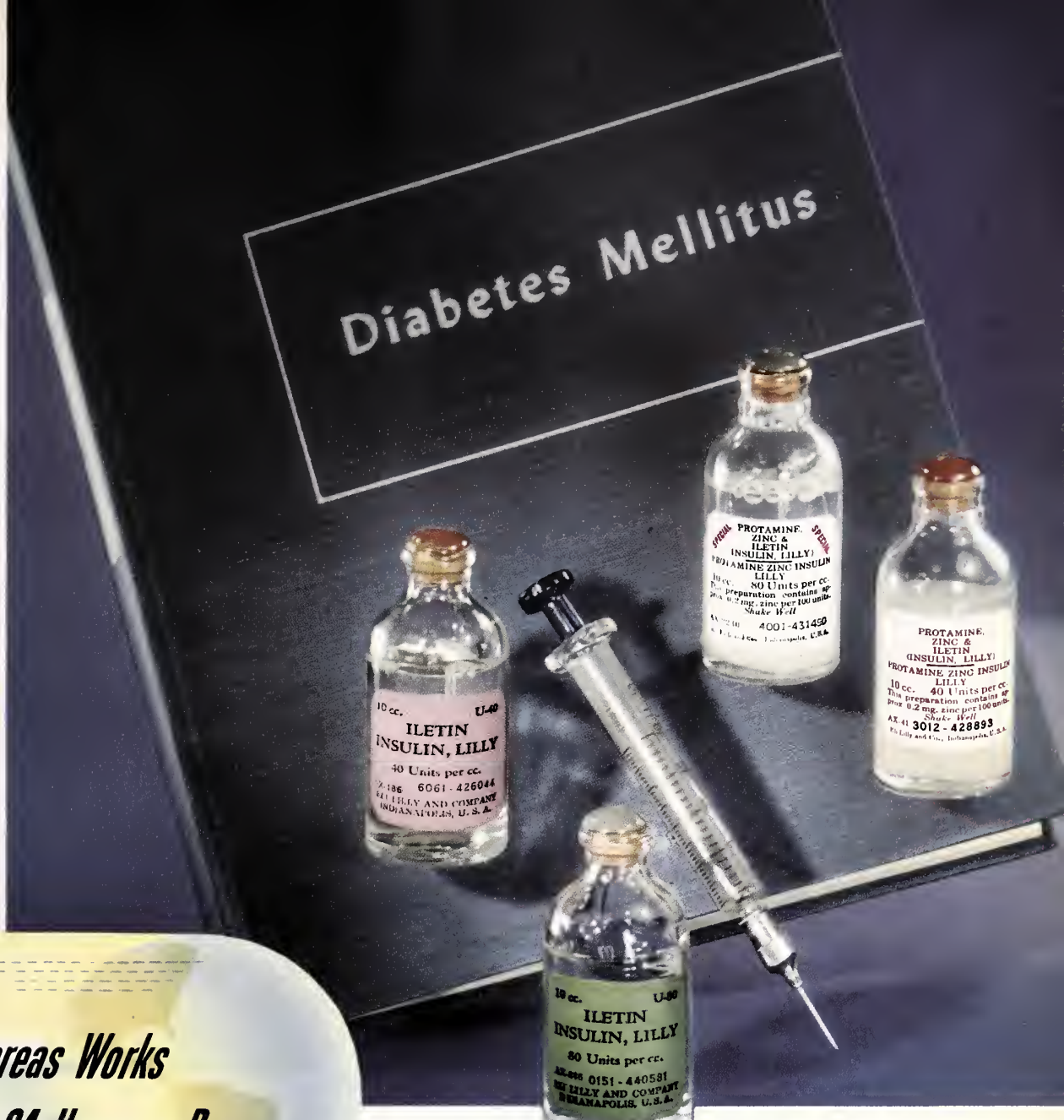
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The Practitioner and the Specialist

P. S. IRWIN, M.D.
HONOLULU

THE establishment of certifying boards in the various specialties, as admirable a thing as that is in most respects, has none the less been associated with an unfortunate tendency to limit the development of general practitioners and to restrict the activities of such physicians in hospitals. This situation, if allowed to progress in this direction to its ultimate end, can, it would seem, have only one result: namely, a completely closed hospital. That that would be an entirely good thing is open to doubt by many who believe that the specialist who is interested only in an ever contracting field of medicine is pursuing a narrow and unintelligent course which will inevitably result in mental isolation and finally in stagnation.

During recent years the need for increased emphasis on the work of the general practitioner has become most apparent in many sections of the country and in no place, perhaps, has that need been more emphasized than in Hawaii, where it is well recognized that the standards maintained in the past have been superior, perhaps, to those of any comparable community in the nation.

During the last few years several organizations have been established in the field of general practice which have been designed to forward the work and protect the interest of the general practitioner. Since the American Medical Association is the agency which includes the overwhelming majority of physicians in the United States and including as it does a preponderance of general practitioners, it is not surprising that the activities of the A.M.A. in this field have more potency than those of smaller and more localized bodies. However, the A.M.A. considers the problem to be one in which local conditions must be weighed and apparently because of this, all over the United States, General Practitioner sections and groups are being formed, to study and work out their local problems. The establishment of a section on the General Practice of Medicine by the House of Delegates of the American Medical Association in 1945 points to a recognized need and is an important step forward in an attempt to overcome this trend of too much encroachment on the privileges of the practitioner. This section and its work is now a feature of each annual A.M.A. meeting. In addition, supplemental sessions, devoted particularly to the needs of the general practitioner, are being held from time to time under the auspices of the A.M.A. and still further indicate the importance which that body attaches to the furtherance of education and advancement in practice of this large group of physicians.

At the centennial meeting in June in Atlantic City, the Council of Medical Education and Hospitals presented a supplementary report to the House of Delegates reviewing the policy of the Advisory Board of Medical Specialties and of the House of Delegates, on the subject of appointment of general practitioners to hospital staffs. This report of the Council takes note of the fact that certain hospitals have established a policy of limiting staff appointments to physicians who are certified by the specialty boards or to those who hold membership in special societies. The report emphasizes that such a policy is contrary to the principles of the Council of Medical Education and Hospitals and that it appears unsound. It further points out that the House of Delegates in 1946 approved a resolution encouraging hospitals to establish general practitioner services and specifically states that the creation of such services would not prevent hospitals from being approved for the training of interns or residents.

This report and its endorsement by the House of Delegates should make clear beyond question, to the boards of trustees and directors of hospitals, that any rule barring a physician from staff privileges because he does not possess a certificate from one of the specialty boards or membership in a specialty society is not in accord with the expressed policy of either the American Medical Association or the Advisory Boards of Medical Specialties.

Hospital staff appointments should depend on the qualification of the physician to render proper care to patients as judged by his colleagues on the professional staff of the hospital, and not on certification or on special society membership. That this statement has the approval of certain specialty groups themselves is evidenced by official reports. For example: the American Board of Obstetrics and Gynecology (*J.A.M.A.*, August 16, 1947, page 1043) states that certification of

Read at a meeting of general practitioners, January 15, 1948.

its members "does not of itself confer or purport to confer on any person, any degree of legal qualifications, privileges, or license to practice obstetrics or gynecology, nor does the board intend in any way to interfere with or limit the professional activities of any duly licensed physician. It was never intended by this board that certification should be required by any hospital as a prerequisite to appointment to various staff positions even though certification or its full equivalent is considered a desirable requisite to appointment in key positions as on the Senior or Chief staff, especially of hospitals expecting to conduct approved services for training of residents. This board does not subscribe to any hospital rule that certification is to be required for medical appointments in ranks lower than Chief or Senior Staff for the obvious reason that such appointments constitute desirable specialist training."

In the same issue of the *Journal*, the American Board of Internal Medicine states: this board "is not concerned with any mechanism which gains special privilege or special recognition for those physicians who have been certified in internal medicine. It has never been the intent of the board to define requirements for membership on the staff of hospitals."

A statement published in the *J.A.M.A.* November 8, 1947, quoting the American Board of Surgery, is also of interest. It says in part: "The American Board of Surgery is not concerned with measures that might gain special privileges or recognition for its certificants in the practice of surgery. It is neither the intent nor has it ever been the purpose of the Board of Surgery, to define requirements for membership on the staffs of hospitals. The prime object of the board is to pass judgment on the education and training of surgeons and not to say who shall or shall not perform operations."

It is therefore accepted that preserving a place on hospital staffs for general practitioners is not a negation of the efforts of administrators and trustees to make our hospitals centers for providing the highest quality of medical care, but rather does it serve as a stimulus to every good practitioner to maintain the quality of his work at the highest level and hence to raise standards and improve hospital service.

In furtherance of this thought in regard to staff appointments, there seems to be unanimity of opinion among the leaders of the profession throughout the country, that the criterion as to whether a doctor may be a member of a staff or even head of a department shall be his actual ability as a doctor and not his membership in societies or his certification by boards.

That this unwholesome separation of the general practitioner from the specialist has become even a matter for discussion bodes no good for American medicine, if its evils are not recognized and means for correcting them are not devised at once.

Young Building.

The Evolution of Human Posture

STEELE F. STEWART, M.D.
HONOLULU

I SUSPECT A woman would lose her husband's interest if she always appeared in a haunting habit of sable hue, never tossing a new hair-do or flashing some new bauble; so even truth must needs be stripped and dressed afresh to inflame our jaded senses. I can hardly expect to add a syllable to the ancient subject of posture, but I hope to display it with a bare mid-riff rather than a hobble skirt.

Tone vs. Posture

A pediatrician feels the quadriceps of a recumbent child and says, "He has good muscle tone," meaning that the muscle is firm and plump and not wilted. These characteristics are better described by the word *turgor,* while *tone* should be reserved for its physiological use as defined by Fulton. Tone is the minimal contraction of a muscle for the maintenance of position, and, as he states, it is very nearly synonymous with posture. Let us think of muscle tone, therefore, in its physiological sense—the minimal contraction of muscle for the maintenance of posture.

Posture vs. Position

Position is distinguishable and should be differentiated from posture. I lay a book on the table; it has position but not posture; i.e., the book has fixed relationships with surrounding objects and it does nothing to maintain that place. There is no "keeping up with the Jones's." It is utterly passive.

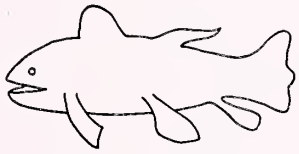
Posture on the other hand is the active conformance of an organism to environment for the maintenance of position. The creature is actively and constantly engaged in collective bargaining for the maintenance of its position in environment. To do so, it keeps its muscles in a constant state of tonic activity.

That far off unrecorded day when man first discovered the mechanical advantage of the wheel and lever gave man all the mechanical elements of the gas engine, but he did not have a gas engine. Nature has gone through an infinitely longer process in perfecting human posture. The evolution of human posture is not a simple process of a quadruped getting up on his hind legs and calling himself man, like the hogs in "Animal Farm," but nature has made one change here, another there to bring to its present perfection the posture of man. It is my intent today to sketch broadly the process by which we have arrived.

In an aquarium one sees a motionless fish equipoised in his native element. A flick of his tail and he has gone. As he lay motionless in the aquarium he had only position. In a running stream he would lie pointing upstream with his tail moving back and forth but without changing his position. For the moment he has struck a balance between his activity and his moving environment that permits him to remain in the spot of his choice. That, then, is posture in the fish.

Locomotion and Posture

However, there came a day in fish history when some restless youth, poor fish, decided to take "shore leave" and "see the world." As he struggled up the muddy wall of his ancient home he had to be prepared to take his oxygen "neat" rather than in his accustomed highball. He had to be trim of line, with pectoral fins long enough to reach the ground and strong enough to bear his weight. These characteristics are all found in a group of fish spoken of as the Crossopterygians or Fringed-Lobe-Finned Fish. As his snout "hit the beach," he would lift his body on his pectoral fins while his tail drove him farther ashore. As the weight fell on the fins two things happened: (1) the weight of the body would bend the edge of the fin backward unless he developed enough muscle tone in the flexors of the tip of the fin to prevent further bending; (2) his fins would tend to do a split from under him unless his adductors developed enough tone to prevent the spreading. These two postural actions are still seen in the spastic who has lost his more human postural characteristics.



Whether or not any fish developed pelvic fins that would lift its tail like a DC-4 to further reduce friction and permit greater ease of motion, I do not know; but with the appearance of amphibia this characteristic was present. During this stage phalanges developed but the carpal and tarsal arrangement remained very simple, the feet

* Received for publication October 24, 1947.



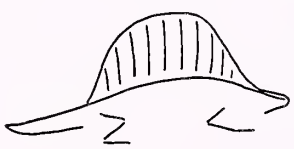
being merely the bent end of a fin. With the promotion of the hind legs to chief propellers, the use of the tail for this purpose undoubtedly became secondary. Physiologically the arm and leg mechanisms are not very effective posturally as the legs were held far from the sides of the body and the creature clumsily moved along presumably using the legs alternately rather than simultaneously as in amphibia. Disturb a frog or a toad and it hops out of your way as short a distance as possible. Their unrested migrations are very brief.

While the developmental radiation of fish has been great, its distinguishing characteristic has been length. The spearhead of evolution has been changed many times, but, having served its purpose, the well-used stock is buried leaving the brunt of battle to a form which has leap-frogged to the center of the struggle. The amphibian radiation seems narrower and the days of its dominance geologically brief, about 30 million years.

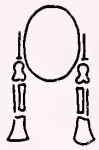
Fish and amphibia were water-bound during reproduction and infancy, but reptiles left the water behind forever, having their young ashore, and earth became their family home.

The reptilian stock developed many diverse characteristics—some became bipeds, others remained quadrupeds. From the former came most of the great dinosaurs and birds and from the latter sprang the mammals. These bipedal forms are not our ancestors, for Nature enjoyed trying all sorts of combinations, like a child with an Erector set.

Man has had some strange non-ancestral relatives (even as you and I), but one of the most unlikely ones is far removed. It is the great sail lizard (Dimetrodon or pelycosaurus) whose chief interest for us today lies in the fact that here began the changes in the feet which ultimately led to the Mammalian heel. Other reptiles retained the bent fin type of feet but pelycosaurus began to turn its ankles so that eventually the os calcis came to lie beneath the talus, a change which must have involved muscular rearrangements. It should be observed here that these changes concerned the hindfeet rather than the forefeet—the latter remained primitive.



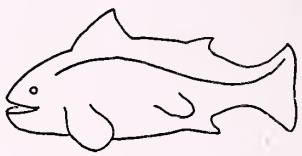
Another postural change affected both arms and legs. Early reptiles in several branches began to pull their legs and arms into their sides instead of sprawling over the landscape. To accomplish this it was necessary that two changes be introduced: (1) in the femur a neck developed which projected obliquely from the femoral shaft to bear the femoral head. (2) The dorsal portion of the shoulder girdle had to be simplified and set free from spine and skull. These changes made weight bearing more direct, decreasing the importance of the adductors which were the great postural muscle of the thigh of more primitive forms. I have never known of a limp due to the paralysis of the adductor muscles, but I can well imagine what would happen if an alligator was so afflicted—his tail would drag.





The Spinal Curves: Visceral and Postural

Whenever you look at a fossil fish you will note that there is a dorsal curving of the spine just behind the head, and there is no neck. Further examination reveals the fact that this curve corresponds to the rib-bearing area of the spine; and the ribs surround the viscera. In other words, the ribs bent the longitudinal muscular activity around the body cavity protecting the viscera from unwonted pressure. Whether the curve of the dorsal spine was great or slight depended on the type of viscera—if the organs were bulky the curve was great, if the organs were linear the curve was slight. In other words the *dorsal curve* was and is a *visceral* and *not a postural* curve. This is important.



Amphibia have but a single cervical vertebra, so their powers of observation are very limited. In reptiles the neck began to develop and at times became of grotesque length. Its movements were not hampered by ribs, and to get its snout off the ground, either for observation, food or air, it had to reverse the dorsal curve, creating thereby a postural cervical curve, which became a fixed part of our heredity. So then by the end of the reptilian age there were two major curves of the spine—the dorsal and the cervical, one *fixed* and *visceral,* the other *moveable* and *postural.*



In all these creatures and most of their descendants the axis of the skull and the spine tend to

coincide. With the development of the cervical curve they would all have become star-gazers but they were not intelligent enough to guide their lives by those celestial bodies, for their brains were small, their interests earthy so they perforce introduced a third postural curve at the distal end of the neck, which brought their sights down to more attractive targets.

Muscular Evolution: White vs. Red

Earlier we observed that fish and amphibia were light or white muscled, that their muscles were coarse and fatigue prompt. In all reptiles known to me the flesh is white and the movements brief but relatively rapid. However, I suspect, but may never prove, that this was not always so. To give point to my suspicion permit me to sketch briefly some familiar pictures:

On the western prairies a jack rabbit, springing from nowhere, races down the road ahead of you and just as quickly is lost in the bush. He is sitting close to the side of the road hunched down in rabbit fashion. You may have noted him stand for a moment as he sized up the situation but none of you ever saw a rabbit stand up for any great length of time, nor have you seen one walk over the hill. You may recall that your wife uses his meat to pad out a chicken.

If your host serves turkey you have a choice of light or dark meat, but if he serves goose you take what you get—dark meat. Audubon tells of turkeys crossing the Ohio river. They sought out the tallest tree on the highest bluff on the river and having mounted to its top they took off for the distant shore. Some made it, many failed. Their great white breast muscles were unable to bear their weight that long. The poorest goose would never go to all that trouble, rather we think of him in the words of Bryant:

> All day thy wings have fanned
> At that far height the cold thin atmosphere,
> Nor stooped not weary to the welcoming land
> Tho the dark night be near.

Consider the horse who patiently stands all day by the side of the road waiting his master's return. Like the goose, he has dark muscles.

May not these anatomical differences betoken differences in physiology? The white muscle fibres are coarse, the muscle loosely knit, the twitch of the fibre is brief, and fatigue comes quickly. The red muscle fibres are fine, the bundles are closely bound and their twitch is slow, contraction prolonged and fatigue comes slowly. Thinking back to the life sketches, the type of the fibre tells the story of the animal's behaviors, of his success and failure. It is hard to believe that the gigantic reptiles, like tyrannosaurus rex, earth's mightiest carnivore, the clap of whose jaws must have seemed as terrible as our own pet brands of sudden death, was a white muscled fellow that after rising on his haunches for a moment had to subside to rest like a rabbit to bask in some primordial glen. Equally hard is it to imagine that the 40-ton brontosaurus spent much of his time lying down when that great hulk had to be kept going on grass and leaves. So it is my guess that back in the days of the great reptiles nature began to experiment with a type of muscle that would permit economical and prolonged bipedal and quadrupedal maintenance. In most mammals the muscle fibres are mixed, but every multiheaded muscle has its red head lying deep to the bone which may be used for postural purposes.

Another important physiological change which may have come during these times was the development of a mechanism for the maintenance of constant temperatures in the more active creatures. Which was the horse and which the cart of this relationship, I cannot say.

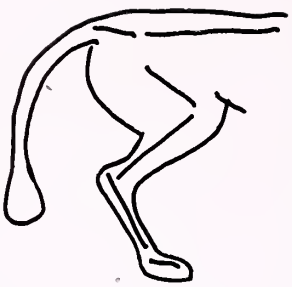
The Upright Position

We mentioned that many early reptiles became bipedal. This is of interest to bipedal man. This change came about in reptiles having heavy tails and relatively delicate pectoral extremities. The pelvic limbs had become dominant for weight bearing and propulsion; the pectoral for grasping and flying. In terrestial forms the hind limbs were greatly modified, while the pectoral generally remained primitive. With them the tail was used as a counterpoise and the axis of the torso remained nearly horizontal. This is the type of bipedal posture that is seen in the ostrich and the emu, the chicken and the duck.

Mammals hark back to a primitive limb pattern —five fingers and five toes, each set about equally developed, although the pelvic extremities were usually somewhat longer and heavier. The most noticeable change to the casual observer would concern the tail, which became lighter and shorter. These changes had become apparent in the transitional mammal-like reptiles — cynognathous, or dog-like-jawed, beasts.

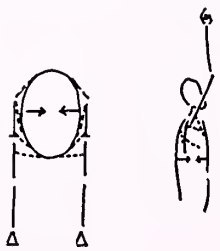
As the age of reptiles was marked by the eruption of many forms, so mammals began to develop a host of structural patterns, but in the present discussion interest centers on the tail and the lumbar area.

First the development of a lumbo-sacral angle tipped the distal end of the sacrum dorsally. Second, thinning of the sacrum distally was due to the reduction of the tail from a heavy major



defensive weapon to a light unsupported member for ornamental and shutter purposes. The anterior portion of the sacrum must needs remain heavy for weight bearing and propulsive thrusts. This thinning of the sacrum was of advantage in the newer methods of reproduction, for the mammalian forms were viviparous rather than oviparous and many of the new born young were large rather than small. The third point of interest is the sacral concavity. In the heavy-tailed reptiles the tail dragged on the ground while pelvic muscles wagged it. When it had become so short that it was supported at only one end, the natural pull of the tail would tend to bend the light end of the sacrum. When the tail had completely disappeared, as in the great primates, all muscle action would be transverse of the pelvis, thereby giving man and the primates their uniquely hollowed sacrum and their third spinal curve, which was fixed or visceral, rather than mobile or postural, in character. This newest curve contributed to the support of the heavy organs which rested on the pelvic floor, and at the same time it would promote the ventral rather than the dorsal embrace.

Originally the primate stock was probably quadrupedal; any attempts at bipedal posture were but momentary. The primates seem to have been relatively defenseless like the herbivores, and judging by their descendants, they lacked the speed and endurance of the latter. This forced them onto the face of cliffs, like the baboon, or more probably into the trees. Here they would travel along limbs and between boughs where they developed the art of brachiation—swinging from branch to branch like a trapeze artist. This brought about a vertical position of the body but the feet dangled. Three anatomical changes seem to be attributable to this changed physiology: (1) changes in the postural muscles, (2) changes in the shape of the chest, (3) changes in the foramen magnum.



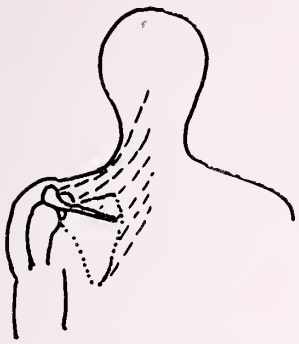
The chest of the mammalian quadruped contrasts to the chest of modern quadrupedal amphibia and reptiles; the former is deep, the later shallow. In the mammalian quadruped the scapulae lie along side the chest with the forelegs immediately beneath them. The chest is suspended in muscle slings formed by the pectoralis major and minor, the subclavius (if present) and the serratus anticus, and the chest is compressed into its common form. The dorsal muscles merely steadied the shoulder girdle. However, when brachiation became the common form of primate locomotion the pressure of these same muscles would cause antero-posterior compression resulting in a wide thin chest, so characteristic of our family. When man left the trees there was no new force compelling further alteration so that man's chest remains as it was.

The third change affected the skull. As has been pointed out, the axes of the skull and the torso roughly correspond in most quadrupeds. If this condition had obtained in the primates after they took to the trees and became brachiators they would have had to steer by the stars. Because of the relatively short neck and large head of the primates a secondary cervical curve could not be developed and the foramen magnum perforce migrated beneath the skull, furnishing man an outlook instead of an uplook.



Brachiation apparently lengthened the distance between the symphysis and sternum in the primate stock, for so far as I can determine, the relative distance is about 50 per cent greater than in other mammals. The abdominal muscles of a horse or a tiger are particularly useful in locomotion, while our belly muscles play little if any part in this procedure. One of the results of the increased loin length in standing man is the development of the second postural or lumbar curve. Thus the human spine has two fixed or visceral curves and two mobile or postural curves.

Becoming an erect biped instead of a horizontal biped like a bird brought certain changes in the postural muscles of the shoulder girdle. In the bird the glenoid was supported strongly from below and steadied by relatively light dorsal muscles. In the quadruped the chest is supported in a sling, as was pointed out, but in bipedal man and the



higher primates, the shoulder girdle and the arms are hung from the upper spine by the upper portion of the trapezius, the rhomboids and the levator of the scapula. Hence the two places where postural backaches occur are the two areas where evolution has been most recent—the root of the neck and the lumbo-sacral angle.

The leg is held erect on the ankle largely by the soleus. The knee is kept extended and the pelvis is balanced on the hips by an economical use of a single set of muscles — the hamstrings. This may seem impossible but an examination of the living subject standing erect and at ease shows that the patella is freely moveable in all directions indicating that the quadriceps is relaxed and non-functional at that time, likewise the gluteals are flabby and relaxed at the same time while the hamstrings are found strongly contracted.

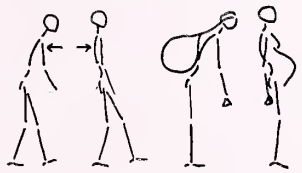


From the pelvis upward the erector spinae group form the chief postural muscles. By them the vertebral pile is erected and from the top of the pile the chest is held up by the scalene muscles. The ventral muscles have little if any postural function—they are essentially visceral, having to do with the major emunctory functions.

"Good" Posture

We have defined posture as the active conformance of an organism to environment for the maintenance of position. How, then, shall we define good posture? Good posture is the most economical conformance of an organism to its environment for the maintenance of position. Intrinsically it has nothing to do with a flat chest or a big steam dome, with a pot belly or protuberant buttocks. Yet these play a part because they are a part of the organism that must be controlled. We think of a flat chest as being tuberculous or phthysical, and the emphasis has been to develop a large chest and avoid tuberculosis. I wonder. A classmate of mine had a beautiful big chest yet he died of tuberculosis, giving himself every care. Perhaps the flat chest is nature's attempt to collapse cavities and permit healing; perhaps man is foolish to try the expansion treatment; if he gets pneumonia he has no reserve. Modern thoracic surgery would indicate that I might be right.

Because we differ in our visceral problems we differ also in our postural problems. I would remind you again that we are not wooden Indians or marble Apollos, neither are we as seismic as Christmas jelly. Our problem is to keep the center of gravity within our base that we may be as our fellows. If I walk into the wind I lean on the wind to simplify my problem; if the wind is too great I may revert to all fours. If I stand on a hill I seem to lean up the hill—in reality I merely keep my axis in line with the radius of the earth. A heavy-breasted woman, a pot-bellied man and a pregnant woman must perforce stand sway-backed and round-shouldered if they would stand economically. The sin comes either in getting that way or in remaining that way after the burden is gone. The young round-shouldered, sway-backed matron is either lazy or has received poor post-partum care, or she may just be plain tired. A girl that puts on high heels throws the postural mechanism out of balance and either her muscles have to take up the slack so that she becomes truly equinoid or else she walks with drooped knees and flexed hips in a very ungainly uneconomical way. Common posture is closely related to customs and ideals. The women of today have idealized the athlete just as in the days of Greece; our grandfathers' sons wanted their women plump. As physicians we must keep our compass bearings in a world of topsy-turvy idealism. I always remember the story of the African prince who visited Queen Victoria. Evidently the queen was perplexed, so she invited the leading actress of the day to the state dinner in honor of the prince. She placed the actress beside the prince, who sensing the situation tried to be exceedingly nice to the stranger. When the evening was over the prince turned to the actress and said, "Madam, if you were fat and black you would be irresistible." Who knows what ideal is carried in the womb of tomorrow, or what nature may have in store? Man is still primitive: If he adapts, he survives; if he fails, he falls.



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The Possible Role of Poi in the Epidemiology of Infectious Intestinal Diseases

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ACCORDING to Allen and Allen,[1] who made the first study of the microbiology of poi, the foodstuff is prepared by allowing crushed, cooked taro to undergo fermentation by bacteria, yeasts, mycoderms, and oidia. They concluded that the process of fermentation occurs in two phases: the first, in which acid-producing bacteria predominate, effects the characteristic changes in souring poi in a kind of fermentation which resembles that which takes place in souring milk; the second, in which yeasts, mycoderms, and oidia become prevalent, does not lead to any appreciable changes in the poi, at least during the period in which it is normally kept before being eaten or discarded.

Allen and Allen also reported that freshly ground poi contained a varied flora, made up not only of the species of Streptococcus and Lactobacillus which cause the souring of the poi, and of the yeasts, mycoderms, and oidia which predominate in the second phase, but made up also of a number of "contaminants" derived from the equipment and the water of the poi factory and from the persons of the workers who help to prepare the poi. These contaminating bacteria include Escherichia coli, Aerobacter aerogenes, Pseudomonas aeruginosa, chromogenic bacteria, spore-forming bacilli, and various other forms in rather large numbers, but they were found to persist "for only three or four hours . . . due to the unfavorable growth conditions created by the acid-producing organisms."

Bilger and Young[2] made a qualitative inventory of the products of the fermentation of poi, and showed that lactic acid, acetic acid, formic acid, [ethyl] alcohol, acetaldehyde, and carbon dioxide were produced in the course of eight days by the action of microorganisms on the carbohydrates of poi. Their analyses of poi indicated that about 29 per cent of poi is made up of these carbohydrates, about 27 per cent being in the form of starches, and the rest being present as pentosans, reducing sugars, and sucrose. In the first twelve hours of fermentation the reducing sugars were rapidly decreased, but no appreciable change was noted for the starches until the second day, after which they decreased steadily.

An interest in the history of infectious disease in Hawaii, combined with an awareness of the methods by which poi is manufactured, mixed, and served, suggested that poi might have been—and might still be—an important vector in the dissemination of infectious intestinal diseases among the inhabitants of Hawaii. This paper reports the results of a study to determine whether bacterial pathogens of the enteric group can be disseminated under natural conditions of preparation, storage, and use of poi.

Methods

The procedure employed consisted essentially of inoculating a measured volume of poi with a known number of test organisms of the colon-typhoid-dysentery group, and in making daily enumerations of these test organisms during the subsequent course of storage, observing the effect of time, temperature, pH, and numbers and kinds of associated microorganisms upon the test organisms as the poi underwent fermentation. The test organisms used were Escherichia coli, Eberthella typhosa, Salmonella schottmuelleri, and Shigella paradysenteriae. The strain of E. coli employed was isolated from human feces in the University of Hawaii bacteriology laboratory. The strains of pathogens were obtained from the Bacteriological Laboratory of the Territorial Board of Health at the beginning of this study. Nothing is known of their history.

Zero-hour poi was obtained from the poi factory* and, after being taken to the University laboratory, was immediately mixed with tap water to the consistency of "three-finger† poi." (Mixtures of one part of poi to two parts of water gave a product of this consistency.) A Waring Blendor was used for mixing, to insure a uniform sample. A 200-cc. portion of this mixture was

[1] Allen, O. N. and Allen, E. K. The manufacture of poi from taro in Hawaii: with special emphasis upon its fermentation. Hawaii Agr. Exp. Sta., Bull. 70, Nov. 1933.

[2] Bilger, L. N. and Young, H. Y. A chemical investigation of the fermentations occurring in the process of poi manufacture. Jour. Agr. Research 51: 45-50, (Jan.) 1935.

* The See Wo Poi Factory, Honolulu, generously furnished samples of poi whenever they were needed, and their cooperation is gratefully acknowledged.

† The allusion is to the number of fingers required to be dipped into a bowl of the poi in order to secure a mouthful of it: the thinner the mixture, the more fingers are needed.—Ed.

then measured into each of two clean beakers. Duplicate plate counts to determine the number of microorganisms present in the diluted poi were prepared from appropriate dilutions, using 1 per cent glucose agar as the plating medium.

At the same time the pH of the diluted poi was determined electrometrically with a Macbeth pH meter.

The inoculum of test organisms being studied was then added to each of the two beakers of diluted poi, and was thoroughly distributed by vigorous mixing, using a clean glass stirring rod. It was early decided that relatively small numbers of the test organisms should be added to the samples of poi being studied. Preliminary tests suggested that one cc. of a 1:1000 dilution of a four-hour culture in nutrient broth of the test organisms would give a conveniently small number of organisms for each cc. of poi. In every instance the number of test organisms being added to the poi samples was determined by making plate counts in duplicate of suitable dilutions of the four-hour broth culture, using 1 per cent glucose agar as the plating medium.

One sample of the inoculated poi was incubated at room temperature, the other at refrigerator temperature (in these studies, about 13° C.).

Daily attempts were made, once each test was begun, to recover the test organisms from each of the inoculated samples. Platings of appropriate dilutions of one-cc. portions of the poi were made in duplicate, the medium used depending upon the organisms being sought. Endo's agar was used for the enumeration of Escherichia coli, bismuth sulfite agar for both Eberthella typhosa and Salmonella schottmuelleri, and S-S agar for both Salmonella schottmuelleri and Shigella paradysenteriae. The first plating was made twenty-four hours after the inoculum was added, and platings were continued until no recovery of the test organism could be obtained, either in direct cultures or from enrichment cultures in Selenite-F enrichment medium. In order to be certain that no surviving organisms were being overlooked when the end of each test was being approached, suspect colonies from the plate cultures were transferred to Kligler's iron agar slants. Those giving typical cultural reactions were checked immediately in spot-agglutination tests with specific diagnostic antisera.

At the same time, total counts of all organisms in the poi samples were made by plating in duplicate one-cc. portions of appropriate dilutions of the sample, using 1 per cent glucose agar as the medium. The samples were thoroughly mixed with a clean glass stirring rod before any portions of them were removed for plating.

Daily determinations of pH were made electrometrically after each day's portion for plating had been removed.

During the course of a year, 13 different tests were made to determine the effect of fermenting poi upon these test organisms. Escherichia coli was studied first because it was a good indicator organism, being readily identified as long as it was present, and because, of course, it was a safe organism with which to work while defining the general technics of these investigations. Five successive tests were made with E. coli. Once the experimental procedure had been outlined and proved, the pathogens were studied. Eberthella typhosa was used in four tests, Salmonella schottmuelleri in two, Shigela paradysenteriae in one, and all four of the test organisms, in a mixed inoculum, were used in a last climatic test.

No attempt at using "aseptic technic" to keep the poi from being contaminated with air-borne or water-borne organisms was made during the mixing of the poi and its subsequent distribution and testing, because it was the intention of these studies to subject the poi samples to the same treatment that they were likely to receive in the home. Once the poi samples were inoculated with pathogens, however, they were treated with proper respect and precaution.

Data and Discussion

Results of some of the tests performed are summarized in Table 1. All of the data assembled are too plentiful even to summarize, but those presented in Table 1 will suffice to reveal the fidelity to pattern which all of the tests with any one test organism exhibited throughout the series.

TABLE 1.—*Length of survival of test organisms in inoculated poi.*

TEST ORGANISM	NUMBER ADDED PER CC. OF POI	LENGTH OF SURVIVAL AND FINAL pH*			
		at room temp.		at refrig. temp.	
		days	*pH*	*days*	*pH*
E. coli	1100	4	3.7	10	4.1
	1150	4	3.7	15	4.1
E. typhosa	250	2	4.3	8	4.4
	570	2	4.3	8	4.4
S. schottmuelleri	1470	2	4.0	8	4.6
	375	1	4.0	6	4.6
S. paradysenteriae	2925	2	3.8	5	4.3

* Figures indicate the last day on which platings revealed test organisms in one-cc. portions of the incubated poi, and the pH readings of the poi obtained at the same time these platings were made. (The test organisms disappeared, in other words, in the twenty-four-hour interval following the times indicated in this table, when the pH of the poi had become slightly more acid than the readings given in the table.)

These results show that pathogenic organisms of the enteric group are able to survive in refrigerated poi for considerable periods of time—for from five to eight days—longer than poi is usually

stored in the home without being eaten. It can be concluded, then, that poi contaminated with these organisms, either at the factory or at the time it is mixed by hand in the home, is potentially dangerous to consumers provided that the inoculum is not so small as to be unable to initiate infection in any event, and provided that the poi is refrigerated during the time it is kept in the home before it is eaten.

On the other hand, poi which is stored at room temperature probably becomes safe enough to eat

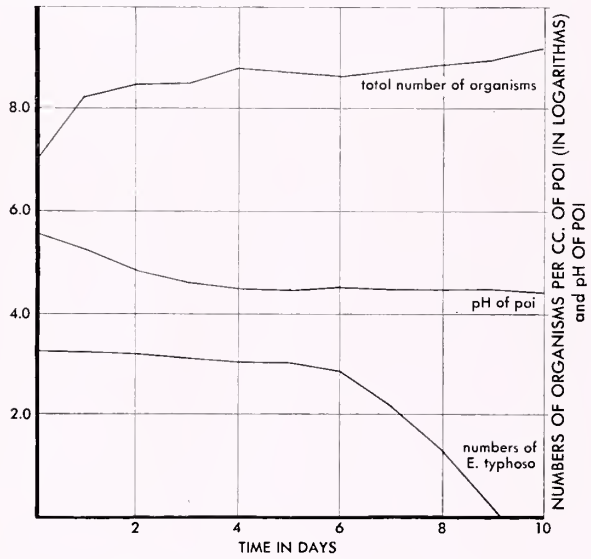


FIG. 1. Effect of total number of organisms and of pH of poi on rate of disappearance of E. typhosa in refrigerated poi.

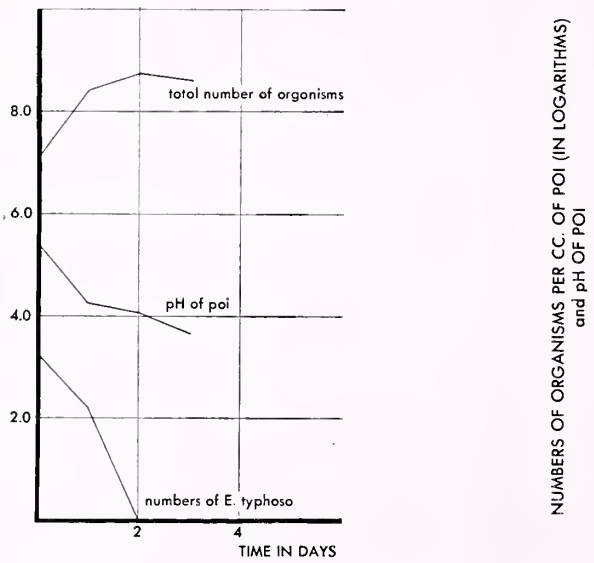


FIG. 2. Effect of total number of organisms and of pH of poi on rate of disappearance of E. typhosa in poi stored at room temperature.

in a short time, for pathogenic organisms are rapidly killed during the process of fermentation, which is hastened, of course, by the warmer temperatures. The poi is potentially infectious only during the first one or two days after it is mixed, during the earlier stages of fermentation. Fresh poi, or sweet poi, as it is sometimes called, is preferred by many people to sour poi, and is frequently served in place of sour poi at public luaus and in the home. People who eat this kind of poi might be endangered. Those who prefer sour poi, and who hasten the process of souring by leaving the fermenting poi at room temperature, will probably be safe from infection.

The rate of disappearance of the pathogenic organisms from the souring poi is correlated with the accumulation of the products of fermentation in the poi. The rate of accumulation of these products obviously depends, in turn, upon the temperature of incubation and upon the number of microorganisms of the natural flora growing in the poi. Figures 1 and 2 show this relationship quite clearly for Eberthella typhosa. Similar curves were obtained for the other two test organisms. The increasing concentrations of the products of fermentation are reflected in changes in pH (as well as in other manifestations, like color, odor, consistency, etc.), and pH determinations offer the most convenient criterion for measuring the extent to which fermentation has progressed. It is not yet possible to say which products of growth of the microorganisms in the poi are responsible for the destruction of the pathogens. Perhaps it is merely the "hydrogen-ion concentration" achieving the "critical pH" of the early authors that accounts for the disappearance of the pathogens, or perhaps it is some more specific substance that acts upon them. The fact that the pH at which the pathogens last appear in the poi samples kept at refrigerator temperatures is measurably higher (that is, less acid) than is the pH at which they last appear in the poi samples incubated at room temperature, would suggest that nothing as simple as the hydrogen-ion concentration alone is the lethal agent, but that one or more of the products of growth must be liberated in sufficient quantities before the bactericidal effect can be achieved, or that, at least, the pathogenic organisms must be exposed for longer periods of time to lower concentrations of the products of growth which act against the bacteria. The numbers of pathogenic organisms introduced into the poi also have some significance, apparently; when very small inocula were used, the pathogens disappeared sooner than was the case with larger inocula.

In any event, the pathogens are destroyed, for attempts to reclaim them by dilution and plating in appropriate media and by subculturing in enrichment broths were uniformly unsuccessful.

A few secondary observations can also be drawn from the data obtained, and should be noted here. These tests showed that E. coli and A. aerogenes and other coliform organisms present in the natural inoculum of the poi can survive in the fermenting poi for longer periods than the observations of Allen and Allen indicate they did. In poi incubated at room temperature E. coli was still present at the end of four days; and it persisted in refrigerated poi for as long as fifteen days. In these investigations A. aerogenes and the other coliform organisms were found to be less hardy than E. coli, even though originally they may have outnumbered the E. coli cells added to the poi. (The great numbers of A. aerogenes and coliform organisms found in the earlier platings of all poi samples would suggest, too, that they play an important part in the initial stages of the fermentation.) E. coli survived the other members of the coli-aerogenes group by as much as five and six days at refrigerator temperature, and by two days at room temperature. When, after a few days, the Aerobacter and coliform organisms did die out, they disappeared almost overnight: they were plentiful in poi samples in which the fermentation process had achieved a pH of 4.0, but had disappeared completely twenty-four hours later, when the pH was 3.8 Even before they disappeared, the yeasts, mycoderms, and oidia had begun to supplant them.

Conclusion

In view of the results obtained in this series of investigations, it can be concluded that poi, if it should become contaminated with pathogenic organisms of the intestinal group, can serve, like other foods, as a vector in the epidemiology of the enteric diseases. Paradoxically, it is the poi which is stored most carefully, in that modern triumph of sanitation and preservation, the refrigerator, which is potentially the most dangerous agent, for the pathogens may persist for as long as eight days in refrigerated poi. Poi which is stored at room temperature succeeds in purifying itself within three days. Under the usual conditions in the home, then, the more sour the poi is—and the sooner it gets sour—the safer it will be to eat.

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The Therapy of Endocarditis

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A SHORT seven years ago Levine,[1] discussing the therapy of subacute bacterial endocarditis, wrote: "Because the disease lasts for months and the general strength of the circulation remains well compensated for a long time, there is ample opportunity to try even extensive and prolonged methods of treatment. A great many different dyes and chemicals have been used intravenously. The one that has gained some support has been sodium cacodylate given daily intravenously for weeks at a time. Vaccines and sera have also been given frequent trials."

It was during this time that experimentation with sulfa drugs for treatment of bacterial endocarditis was begun. We can look back rather smugly at the great therapeutic strides that have been made since 1940. It is the purpose of this paper to review the results of these strides and the modern concepts of therapy in endocarditis.

Non-Bacterial Endocarditis

Rheumatic endocarditis. Endocarditis due to rheumatic fever is the most common of all endocardial inflammations. The exact etiology is not known, but the inability to get positive cultures classifies it as non-bacterial. The treatment is the same as that for acute rheumatic fever.

The most commonly used drug for this widespread disease is acetylsalicylic acid or one of its derivatives. Acetylsalicylic acid or its sodium salt may be given at regular, frequent intervals in doses up to 120 grains (8 grams) daily. It is important to use large doses, up to the point of toxicity. The use of sodium bicarbonate to prevent toxicity is a problem for individual discretion. I do not use it. The work of Smull *et al.*[2] demonstrated that sodium bicarbonate depresses the salicylate blood level by increasing renal excretion and interfering with absorption. The use of para-aminobenzoic acid simultaneously with salicylates in order to increase the salicylate blood level has been reported by Dry, Butt, and Scheifley.[3]

In 1945 Gubner and Szucs[4] suggested the use of calcium double salt of benzoic acid and succinic acid benzylester. They had a series of 150 cases which was divided into four control groups and the test group. Their results in shortening the episode of activity were impressive. Several of us in Honolulu have tried the calcium double salt, but we were disappointed in most instances and had to finally resort to salicylates to benefit the patient's condition.

Part of the action of the calcium double salt is due to the oxidation reduction of cytochrome by succinic acid[4]. There is a close relationship between the cytochrome enzyme system and porphyrin metabolism, the latter being upset during acute rheumatic fever, as evidenced by porphyrinuria. As pointed out by Proger and Dekamas,[5] cytochrome C exists in organs in suboptimal amounts. This raises the exciting possibility that when the production of cytochrome C increases it may be used in therapeutic doses along with succinic acid to facilitate its reduction in the body. I was unable to find any reference to such an attempt in the literature. It may be of therapeutic value.

There are many other drugs used in the treatment of acute rheumatic endocarditis. Aminopyrine and sodium benzoate are probably used more than any drugs except salicylates, but they are not popular. The use of penicillin and sulfonamides is not indicated in rheumatic endocarditis. Sulfonamides in any form are actually harmful during the active period.

Fetal endocarditis. This is a relatively rare type of endocardial inflammation. The term is probably a misnomer as myocardial scars or myocardial fibrosis are pre-requisites for the diagnosis.[6] Most workers feel that the endocarditis is the result of a maternal infection. It would seem, therefore, that the best therapy would be prophylactic, i.e., treat heroically the pregnant

Read before The Queen's Hospital Internal Medicine Seminar October 7, 1947.

[1] Levine, S.A.: Clinical Heart Disease, 2nd Ed., Philadelphia and London, W. B. Saunders Company, 1940.

[2] Smull, K.; Wegria, R., and Leland, J.: The Effect of Sodium Bicarbonate on the Serum Salicylate Level During Salicylate Therapy of Patients with Rheumatic Fever, J.A.M.A. 125:1173 (Aug. 26) 1944.

[3] Dry, T. J.; Butt, H. R., and Scheifley, C. H.: The Effect of Oral Administration of Para-Aminobenzoic Acid on the Concentration of Salicylates in the Blood: Preliminary Report, Proc. Staff Meet., Mayo Clin. 21:497 (Dec. 24) 1946.

[4] Gubner, R. and Szucs, M.: Therapeutic Measures in Rheumatic Fever, New Eng. J. Med. 233:652 (Nov. 29) 1945.

[5] Proger, S., and Dekamas, D.: Some Effects of Injected Cytochrome C in Myocardial and Cerebral Anoxemia in Man. J. of Pediat. 29:729 (Dec.) 1946.

[6] Gross, P.: Concept of Fetal Endocarditis, Arch. of Path. 31:163 (Feb.) 1941.

woman with an infection. Most cases reported fail to reveal any maternal infection during the period of pregnancy. Since blood cultures done on these infants are invariably sterile, the therapy is empirical. I would suggest small, frequent whole-blood transfusions and large doses of penicillin.

Bacterial Endocarditis

Acute bacterial endocarditis. Before the advent of penicillin this disease was almost 100 per cent fatal. It is still a highly dangerous disease, but many are recovering with penicillin therapy. In a series of 48 cases of acute bacterial endocarditis treated with penicillin, 15 persons survived.[7] Of these cases 6 were due to staphylococcus aureus, one was due to staphylococcus albus, 5 to streptococcus hemolyticus and one to pneumococcus. Myers[8] reports recovery in a case of acute gonococcic endocarditis and adds 3 similar cases reported by the National Research Council.

The treatment of acute bacterial endocarditis is similar to that of the subacute variety, which will be discussed in the following portion of the paper. There is one exception, and that is that therapy should be instituted at once. Blood for cultures should be taken and then penicillin in large doses begun without waiting for a report. Geiger and Anderson in their case report[9] of a patient with Lutembacher's syndrome complicated by acute pneumococcal endocarditis suggest that the loss of forty-eight hours' time waiting for the culture may well have been a fatal delay.

Subacute bacterial endocarditis. In treating endocarditis lenta, the preliminary steps are among the most important. At least three and preferably five or more positive blood cultures should be obtained before chemotherapy is begun. It would seem reasonable to culture the blood aerobically and anaerobically, as well as inoculating Sabouraud's medium. By so doing, much loss of time and guess-work may be eliminated. After the same organism has been isolated several times, it may be logically concluded that it is the pathogen. The next step is to test the organism in vitro against varying strengths of penicillin in order to determine what concentration of penicillin will be needed to inhibit the organism involved.[10]

Dawson and Hunter[14] point out that the use of in vitro results for computing dosages is questionable, but it is at least of value for a rough approximation. They suggest that as a working hypothesis penicillin be administered in doses large enough to keep the penicillin serum concentration at least four times as high as the amount required to inhibit the organism in vitro.

The method of administering the penicillin is open to argument. During the early clinical trials penicillin was usually administered intravenously. Goerner, et al.[11] show illustrations of their patients sitting up with needles fixed well in place in wrist veins. Because of the thromboses at the sites of infusion and the lack of good veins in many patients, intramuscular injections at regular intervals were soon substituted. This method does not offer the high serum concentrations of penicillin that constant intramuscular drip will furnish. Dawson and Hunter[14] show a table correlating the penicillin serum level with varying doses of penicillin administered by constant intramuscular drip. When a daily dose of 200,000 units was given in this manner, the average serum level was .07 units per cubic centimeter of serum. When 2,000,000 units was given as a daily dose, the average serum level was 1.6-2.24 units per cubic centimeter of serum. If penicillin is given at intervals of three hours, the serum level varies greatly due to rapid excretion through the kidneys. If very large doses are to be used, for example over 5,000,000 units a day, it may be necessary or advisable in addition to give penicillin intravenously, at least during the day. When the penicillin is given intramuscularly, it may be given through a needle inserted into the quadriceps femoris muscle or through a flexible plastic tube similarly inserted into the thigh.[14]

We might set up a sample case problem in which the organism cultured from the blood stream was inhibited in vitro by a concentration of 0.7 units of penicillin per cubic centimeter. An optimum concentration in vivo would call for 2.8 units of penicillin per cubic centimeter of serum. In order to attain this level it would be necessary to administer about 3,000,000 units of penicillin daily by constant intramuscular drip.

[7] Wilhelm, F.; Hirsh, H. L., Hussey, H. H., and Dowling, H. F.: The Treatment of Acute Bacterial Endocarditis with Penicillin, Ann. of Int. Med. 26:221 (Feb.) 1947.

[8] Myers, W. K.: Penicillin Therapy of Gonococcic Endocarditis of the Pulmonary Valve, J. A. M. A. 133:1205 (April 19) 1947.

[9] Geiger, A. J., and Anderson, H. C.: Lutembacher's Syndrome Complicated by Acute Bacterial Endocarditis, Am. Heart J. 33:240 (Feb.) 1947.

[10] Goerner *et al.*[11] Hartwell.[12] Massell *et al.*[13] Dawson *et al.*[14] Meads *et al.*[15] Hunter *et al.*[16]

[11] Goerner, J. R.; Geiger, A. J., and Blake, J.: Treatment of Subacute Bacterial Endocarditis with Penicillin: Report of Cases Treated without Anticoagulant Agents, Ann. of Int. Med. 23:491 (Oct.) 1945.

[12] Hartwell, A. S.: Massive Doses of Penicillin in Cases of Subacute Bacterial Endocarditis, Proc. Staff Meet., Clinic, Honolulu. 13:41 (May) 1947.

[13] Massell, B. F., and Jones, T. D.: Subacute Bacterial Endocarditis, New Eng. J. Med. 235:605 (Oct. 24) 1946.

[14] Dawson, M. H., and Hunter, T. H.: The Treatment of Subacute Bacterial Endocarditis with Penicillin: Second Report, Ann. of Int. Med. 24:170 (Feb.) 1946.

[15] Meads, M.; Harris, H. W., and Finland, M.; The Treatment of Bacterial Endocarditis with Penicillin, New Eng. J. Med. 232:463 (April 26) 1945.

One of the difficult problems posed to the physician is how long to continue the penicillin. There is no set rule but obviously therapy should not be discontinued as long as the blood cultures are positive and the patient is febrile. From this point on cessation of therapy is arbitrary. If a relapse is to occur, it usually does so within a few days. Dawson and Hunter[14] state that their longest interval between treatment and relapse was two weeks. If relapse occurs, penicillin in larger doses should be started again and maintained over a longer period of time. What has been said of penicillin holds true for streptomycin when its use is indicated.

Hunter and Duane[16] quote Thayer, who estimates that at least 2.5 per cent of all cases of subacute bacterial endocarditis are caused by the Hemophilus influenzae group. In this same article many authorities are quoted to show that 90 to 95 per cent of the cases are due to streptococcic infection. This means that in a considerable number of instances the offending organism is a gram negative bacterium, which will be insensitive to penicillin. These organisms should of course be tested against streptomycin, and the same procedure used in computing dosage of penicillin should be utilized. Priest and McGee[17] used penicillin in large doses along with streptomycin even though the penicillin did not inhibit the organism when the streptomycin did. This is probably an extra measure of precaution, and I would endorse it as a routine procedure.

The use of anticoagulants has been discarded by most workers in the treatment of subacute bacterial endocarditis.[18] There are only two possible indications for the use of heparin.[14] First: in some patients if large emboli have lodged in major vessels it may be advisable to use heparin in order to prevent retrograde thrombosis and thus keep collateral circulation open. Second: when large doses of penicillin are administered intravenously thrombophlebitis at the site of the infusion may occur. Heparin in small amounts put into the fluid will usually prevent this.

There are many adjuvants to be considered in the treatment of bacterial endocarditis. Blood transfusions, vitamins, and supportive drugs as indicated should be readily utilized. Food that is appetizing as well as nourishing is important physiologically and psychologically. Occupational therapy aids the mental attitude and should be employed when possible.

Peripheral emboli cause pain. This can usually be controlled by codeine and salicylates. Heart failure is to be watched for constantly. If it occurs, it should be treated promptly.

Actinomycotic endocarditis. This is strictly speaking non-bacterial, but clinically it falls into the same category as bacterial endocarditis. It should therefore be considered under the same heading.

In discussing the cultures for subacute bacterial endocarditis, I suggested that some of the blood be inoculated upon Sabouraud's agar. By so doing the occasional case of endocarditis due to actinomycoses will not be missed. When routine cultures are persistently negative in a case which is clinically subacute bacterial endocarditis, actinomycotic infection should be suspected. Wedding[19] reviews the literature on this subject, but unfortunately there is little encouragement from the standpoint of therapy. . Penicillin and sulfadiazine in large doses are advisable.

Summary

A review of the therapy of non-bacterial and bacterial endocarditis is presented.

[16] Hunter, T. H., and Duane Jr., R. B.: Bacterial Endocarditis, J.A.M.A. 132:124 (Sept. 21) 1946.

[17] Priest, W. S., Smith, J. M., and McGee, C. J.: The Effect of Anticoagulants on the Penicillin Therapy and the Pathologic Lesion of Subacute Bacterial Endocarditis, New Eng. J. Med. 235:699 (Nov. 14) 1946.

[18] Goerner *et al.*[11] Massell *et al.*[13] Dawson *et al.*[14] Meads *et al.*[15] Priest *et al.*[17]

[19] Wedding, E. S.: Actinomycotic Endocarditis, Arch. Int. Med. 79:203 (Feb.) 1947.

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Benadryl in Acute Lepra Reactions

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KALAUPAPA, MOLOKAI

FOR many years leprologists have believed that allergic factors probably play a significant role in those acute exacerbations of leprosy known as lepra reactions. While much experimental and theoretical work has been done on the role of allergy in the lepromin skin test in leprosy, there has been very little actually done about the role of allergy in the lepra reaction except for statements of its probability. The purpose of this study was to observe the effects on the course of acute lepra reactions of Benadryl (B-dimethylaminoethyl benzhydryl ether hydrochloride), an anti-histamine drug which has recently proved useful in treatment of many allergic disorders.

Method of the Experiment

A total of 9 cases is included in this series including 3 acute lepra reactions of spontaneous occurrence, 4 acute lepra reactions which were apparently precipitated by promin therapy, and 2 "major tuberculoid" reactions. By an acute lepra reaction is meant an acute exacerbation occurring in a patient having the lepromatous "cutaneous" form of the disease. This reaction is characterized by exacerbation of existing lesions, appearance of new lesions, ulcerations, high fever, profuse diaphoresis, and in general an acutely ill patient. The reaction may last from several weeks to several months. It is often accompanied by erythema nodosum or bullous erythema multiforme. The major tuberculoid reactions occur in those patients having the tuberculoid (maculoanesthetic or "neural") form of leprosy and are characterized by a sudden intense flare-up and spread of the existing cutaneous macules. These patients usually have little or no fever, and in general remain quite comfortable, often ambulatory. Erythema multiforme does not occur in these cases.

For this study patients were selected for treatment who reported at the beginning of an acute reaction. No patients who waited until after the reaction had become well established before reporting to the doctor were included. An average dose of 50 mg. of Benadryl t.i.d. was prescribed. In a few cases it was necessary to reduce the dosage because of toxic symptoms such as drowsiness or dizziness. The drug was continued for a few days to several weeks depending on the length of the reaction. Since no single patient has two reactions exactly alike, and no two patients have reactions in identical manner, the intrinsic limitations of the experiment are evident. Results were classified objectively according to the course of the reaction under treatment compared to previous reactions as to duration, anatomical extent, fever, and ulcerations, and subjectively according to the patient's own statement regarding the course of the reaction as compared to his previous reactions.

Discussion of Cases

Spontaneous Acute Lepra Reactions

Three cases, 2 adult women and 1 adolescent girl, were included in this series. All were cases who had histories of previous acute lepra reactions of very severe type with high fevers, many new lesions, many ulcerations, and protracted hospitalization. In all the course of the reaction was definitely shorter than previous reactions, the patients were more comfortable and required no other medication for pain after Benadryl was started. No ulcers developed in these cases, and the 2 adults who had had previous experience with reactions were enthusiastic about the drug.

Acute Lepra Reactions Precipitated by Promin Therapy

One of the difficulties in the promin therapy of leprosy is the tendency of this drug to precipitate acute lepra reactions. The mechanism of this action has not been explained. In this group 4 cases (3 men and 1 woman) were included. All 4 patients were advanced lepromatous cases with histories of previous acute and chronic reactions, and many chronic ulcerations. They had all been receiving promin in small doses for less than a month at the onset of the reaction. The reactions all started in the same manner with many new cutaneous infiltrations, temperatures ranging between 103 and 105, profuse sweats, and marked general discomfort. Promin was immediately discontinued, the patients hospitalized and Benadryl 50 mg. t.i.d. prescribed.

The 3 men had almost identical clinical courses. In each case the length of the reaction was one month. Two of them required no other medication for pain except 10 grains of acetylsalicylic acid each on one occasion. Originally it had been intended to keep the third man as a "control" case

Dr. Box was formerly Assistant Resident Physician at Kalaupapa.
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but after two weeks of observing his discomfort—diaphoresis, aches, insomnia, and frequent requests for aspirin, codeine, and sedation, it was decided to give him Benadryl too. He immediately became more comfortable and required no other medication. None of these patients developed any new ulcerations, and one experienced healing of some previously chronic ulcers. Promin therapy was resumed on 2 at the end of one month.

The clinical course of the female patient in this series was unusual. Her reaction began typically with a high fever, new infiltrations over the entire body, and a very swollen face. Promin was discontinued, she was hospitalized and Benadryl 50 mg. t.i.d. prescribed. Her lesions subsided almost completely and though she still had a low fever it was decided to discontinue the Benadryl ten days later. She continued to improve for the next two weeks, and then a few new lesions appeared. Benadryl was again prescribed, the reaction subsided again, and after two weeks the drug was discontinued. Ten days later she again developed new lesions, and again Benadryl was prescribed, but this time the patient became so uncomfortable due to painful macules on her back that it was necessary to discontinue the Benadryl in order to prescribe sufficient narcotics for her. Previous to this time she had not required narcosis. Because of its side effects, particularly drowsiness, it has been recommended that caution be exercised in the administration of Benadryl in combination with narcotics or sedatives. Unfortunately I was unable to remain in the Settlement to observe the final outcome of this case.

The difficulty in evaluating the effects of Benadryl on this series of cases who had already been receiving promin therapy for the first time in the course of their illness is evident. In general, beneficial effects of promin therapy are not believed to appear in less than six months. Since these patients had been receiving promin in small doses for less than one month, it does not seem likely that promin would be entirely responsible for the apparent modification of the course of these lepra reactions.

Major Tuberculoid Reactions

Two "major tuberculoid" reactions in adults, one man and one woman, were observed.

The woman developed a major tuberculoid reaction with many extensive confluent brilliant red elevated macules scattered over her entire body and face. This was associated with marked edema of the hands and feet. She received 100 mg. Benadryl t.i.d. for six days. The edema of the hands and feet subsided in three days, and it was felt by the staff that there was a definite paling of the color of the macules. The patient became uncooperative and also complained of some dizziness, so that her medication was discontinued. Her reaction followed a protracted course, the patient remaining in the hospital for seven months.

The second case, a 30 year old man, developed a tuberculoid reaction involving the face and trunk. Benadryl 50 mg. t.i.d. was prescribed, and his lesions subsided sufficiently so that he was discharged from the hospital in two weeks. He returned in ten days with a recurrence, and this time did not appear to respond to Benadryl therapy.

Since major tuberculoid reactions are relatively rare, and since there had been no opportunity for observing reactions in either of these patients previously, there is no accurate basis for evaluation of the effects of Benadryl in either of these cases.

Comments

I am acutely aware of the deficiencies of this experiment. In the first place the selection of patients who reported at the very beginning of their reactions may easily have prejudiced the evaluation of results. In years past, and too frequently in the present, most of these patients delay reporting to the hospital until their reactions are well established. Secondly, in the comparison of previous reactions with those under treatment, it was too often necessary to depend on the memories of patients and nurses instead of on accurate and detailed clinical records.

Conclusions

1. Three spontaneous acute lepra reactions appeared to respond favorably to treatment with Benadryl.
2. Four acute lepra reactions apparently precipitated by promin therapy appeared to respond favorably to treatment with Benadryl, but cannot be used justifiably as criteria because of the fact that they had had promin.
3. Two major tuberculoid reactions were treated with Benadryl with equivocal results.
4. The treated patients were unanimously definitely more comfortable than those not receiving Benadryl.
 a. They had no pain.
 b. They needed no sedation.
 c. In this series, the patients did not have the profuse diaphoresis which patients not receiving Benadryl, or patients receiving acetylsalicylic acid compounds, are subject to.
5. None of the 9 patients included in this series developed any new ulcers during the reaction.
6. Further investigation of the use of antiallergic drugs in the treatment of acute leprous reactions is indicated.

Hypnotism as a Practical Therapeutic Procedure

BRYANT WEDGE, M.D.
HONOLULU

DURING THE past year on the psychiatric service at The Queen's Hospital a considerable experience has been gained in the use of hypnotism as a treatment procedure. Many questions have been raised in this period about the nature and usefulness of this method. Its use is met with every attitude from frank disbelief to tremendous overenthusiasm for its possibilities. It is felt that a presentation of some of this experience and the conclusions to which it has led might be of general interest.

The phenomena of hypnotism have certainly occurred in man since very early in his history; the trance appears in some of the most primitive religious practices known; but they have been subjected to scientific scrutiny only in comparatively recent years. Mesmer began paving the route to scientific study in the 1770's; it was carried forward by Baird in the mid-nineteenth century in England, and by Liebault in France in the 1860's[1]. Bernheim, a French physician at Nancy then "discovered" hypnotism and taught the techniques to many medical men, including Sigmund Freud[2], toward the close of the nineteenth century. Since then numerous psychologists and physicians have elucidated the techniques, phenomena, and nature of hypnotism.

Hypnosis is the induction of a "trance-like" state of greatly heightened suggestibility, usually brought about by direct suggestion of the operator, but also occurring by self-suggestion or simply by application of repetitious sensory stimuli. Various approaches are used in practice; there are even "hypnoscopes" which increase suggestibility by maintaining a focus of attention. The most generally useful method, however, simply consists in approaching the patient in an extremely authoritative manner and commanding or persuading him into a hypnotic coma by repetitious suggestion that sleep is going to occur. It is this technique which the author has followed. Usually the nature and possible usefulness of the procedure is explained to the patient before commencing but occasionally this explanation is eschewed when it is felt that the patient has insufficient intellectual resources to comprehend or accept the therapy. The following is a case in point.

Received for publication October 22, 1947.

[1] Estabrooks, G. H.: Hypnotism, Dutton, New York, 1945.

[2] Freud, S.: Autobiography, Norton & Co., New York, 1935.

Case Report

CASE 1—A Japanese seaman in the twenties was admitted to the surgical service of Queen's Hospital with a possible appendicitis. The day before admission he had developed severe stabbing pain in his right lower quadrant and flank. He would cry in agony if these areas were palpated and remained doubled up in bed lying on his left side and resisting all attempts to change his position. He had no vomiting or diarrhea but he would eat almost nothing. He remained in this state for ten days without appreciable change. Then psychiatric consultation was called because of discrepancies in the clinical picture.

On examination the general picture was as above. In addition it was noted that there was a marked hypasthesia of the right side of the body extending precisely to the midline and up to the level of the belt. There was also weakness of the right leg although the reflexes were entirely normal.

History was obtained through an interpreter as the patient had just been removed from a Japanese-manned vessel and spoke no English. The significant points of the history were: (1) that the patient thought the vessel he was on was going to the States, whereas he wanted most desperately to return to Japan; (2) that he had just heard that his father had died in Japan of paralysis following an injury to his head; and (3) that he had suffered a back injury himself a week before onset. It seemed fairly obvious that in his need to escape from his situation he had developed hysterical symptoms in the pattern uppermost in his mind at the moment.

It was felt that with the clean-cut nature of his illness, the completeness of his conversion, and his relatively simple mental make-up, he represented an ideal case for hypnotherapy. Accordingly a psychiatric nurse who spoke Japanese was instructed in a simple technique of hypnotism, and simply by telling the patient repeatedly that he was falling asleep was able to induce a hypnotic trance. The patient was then told that the quickest way to return to Japan would be to remain with his ship which would eventually return and that his symptoms would rapidly disappear; and except for some "face-saving" limping the next day, he became entirely well and was returned to his vessel.

Comment

This simple case illustrates the usefulness of hypnotism in the treatment of conversion hysteria, and, when the sickness is well-defined this dramatic result may often be obtained, whether the complaint is of pain, anesthesia, paralysis, or other symptoms. It is interesting that these symp-

toms can be produced almost at will by suggestion under hypnosis; in fact it is on these, as well as on more bizarre productions, that the popularity of the procedure as a demonstration rests. These phenomena are perfectly easy to elicit and no doubt prove very entertaining but should, I believe, be heartily condemned as they have no usefulness and may on occasion be seriously harmful.[3] It should be emphasized that simple removal of symptoms is not sufficient treatment; such symptoms never appear without cause, and it is only when the cause is ferreted out and corrected that therapy can be considered complete. Often the patient will almost immediately describe the basis for his illness under hypnosis, although in the waking state his answer most frequently has been, "Nothing at all is bothering me, Doctor." In the case just cited it was sufficient merely to re-educate the patient in the method of obtaining his goal; that is, he had to be brought to believe that the shortest route home was his continued good function about his ship. When this had been done his treatment was considered completed. The most obvious use of hypnotism, then, is those cases of hysteria in which the conversion is quite complete. It is interesting that nearly all such patients are extremely susceptible to hypnotism unless a considerable admixture of anxiety is present.

A second field of usefulness for hypnotherapy is found in certain cases of very real medical illness in which there seems to be an important psychogenic contributing factor. The results in these patients are somewhat less dramatic, and in general it is felt that other measures such as psychotherapy or narcosynthesis are at least as useful as hypnosis. However, at times hypnosis may be the method of choice. A case which excellently indicates this use is the following:

Case Report

CASE 2—A 28 year old Chinese youth was admitted to a room on the medical service at Queen's Hospital with bronchial asthma. The admission note stated that he had suffered intermittently from asthma for many years, that it had been growing steadily worse for the last three months during which period the patient had lost seven pounds. It was also noted that "he has had a lot of therapy including adrenalin, ephedrine, aminophyllin, etc.," and that "patient believes he is allergic to house dust and cold air." Physical examination was essentially negative except for a "run-down" general state and the classical findings of bronchial asthma. Neurological examination was negative. The blood count was within normal limits except for 5 per cent eosinophiles on the differential white count, and the urine was normal. On the night of the ninth hospital day psychiatric consultation was requested. The patient was found sitting in bed wheezing violently, moaning, asking for "shots," and almost unable to talk due to respiratory needs. He was told that he was going to be given some exercises in relaxation which might help him and a hypnotic trance was induced. Within a few minutes he was breathing quite easily. He was then asked what was bothering him. He then related his essential difficulty; he had a strong drive for perfection in his school work engendered by an earlier failure and this drove him to Herculean efforts of study. This conflicted with his drives for friendship and society; moreover, he was aware that he could not become "the top of the class" no matter how hard he tried.

This material was later cautiously introduced consciously and an attempt was made to help him diminish his drive for perfection and rationalize his failure to "be the top." His asthma rapidly disappeared and he left the hospital on his fourteenth day. He returned, however, two days later with a recurrence of asthma which immediately disappeared when he had made the decision not to return to the University for the term. When seen several months later he had made a good adjustment and had been practically free from illness but had decided not to return to school.

Comment

This case demonstrates the use of hypnosis as an opening wedge for the psychiatric treatment of a psychosomatic disorder. This patient was of such a make-up that he would have summarily rejected any approach which did not bring almost immediate relief. It is also an excellent example of the concept so well put forward by Billings[4] that asthma may result from any combination on the scale from a completely allergic to a completely psychogenic basis. Other psychosomatic illnesses may yield to approach by hypnosis, for example, continued vomiting in which patients have been persuaded to take and retain food for the first time in the course of the sickness by hypnotic suggestion.

A third use for hypnotherapy is in the treatment of the acute reaction which may be precipitated in fairly normal persons by an extremely shocking series of events. The prime examples of this are, of course, the combat neuroses. Much has been written on the use of narcosynthesis with the barbiturates, ether, and other drugs, and on the splendid results obtained on the combat neurosis in the late war. Not until rather late in the war, in fact, in the Pacific campaigns following V-E Day did hypnosis begin to be used in this condition on any wide scale and much of what was learned has yet to be published. However, this procedure bids to replace narcosynthesis to a considerable extent in the future. This is because the results are excellent, the equipment and supplies required are almost nil, and the process actually requires much less time than narcosynthesis. Soldiers suffering from combat neuroses are

[3] Henderson, D. K. and Gillespie, R. D.: Textbook of Psychiatry, 6th. Ed., p. 183, Oxford University Press, London, 1946.

[4] Billings, E. G.: Dynamic and therapeutic factors of 17 cases of so-called psychogenic asthma, Rocky Mountain M. J. 44:197, 1947.

generally easy to hypnotize, and their reactions under hypnosis are somewhat easier to control than under narcosis. They can generally be brought within one or a few sessions to re-live the traumatic situations, releasing their emotional charges for the experiences. Following these treatments they are greatly relieved, their symptoms fade or dramatically disappear, and they are frequently able to return to duty within a very few days.

Army psychiatrists who worked almost immediately behind the lines, were able to hypnotize their patients in spite of the nearby battle and obtained very gratifying results, often returning soldiers to duty within a day or two. This is of tremendous significance when the problems of transport and replacement of troops in forward areas are considered, especially with the rapid movements of modern warfare with great distances to be covered.[5]

Although few and relatively late cases of combat neurosis were seen at Queen's Hospital in 1945 some excellent results were obtained as illustrated by the following case:

Case Report

CASE 3—A 27 year old Caucasian fishing guide was admitted to the medical service of The Queen's Hospital. The night before admission he had stumbled and fallen to the floor, striking his head. He was rendered unconscious for five or ten minutes and on regaining consciousness found that he could not move his right arm and leg and that sensation was lost in these limbs. These symptoms remained unchanged and psychiatric consultation was called the afternoon of admission.

Past medical history was essentially negative. Physical examination showed a flaccid paralysis and "anesthesia" for all sensation over the right side of the body and the right extremities. Neurological examination showed all reflexes active and bilaterally equal with no pathologic reflexes.

A survey of the above findings, coupled with the remarkable lack of concern (*"la belle indifférence"*) of the patient regarding his illness was sufficient to make certain the diagnosis of conversion hysteria. The patient denied that he had any difficulties in his life situation or that anything was bothering him. However, his wife, who was about six months along in her first pregnancy, said that the patient had been extremely tense since his return from the war, that he jumped at the slightest unexpected sound (startle reaction) and that, although he rarely talked of his service, he had been having battle dreams at night. During these dreams he would shout commands, count, and rush about the room, often smashing furniture that got in his way and on several occasions hurting her when she tried to rouse him.

Hypnotic trance was easily induced and the patient was told that he would rapidly recover from his symptoms and would be able to walk the next day. Inquiry into what lay behind this illness brought forth the information that the patient's new business was getting a very slow start, while he felt ever increasing responsibility with continuation of his wife's pregnancy; he simply could not see any solution to his financial problems. Following this session the patient was able to walk and he was able to return home the next day. Meanwhile he had been brought to discuss his business affairs and was encouraged to have faith in their eventual success, which, incidentally, has since come about.

He returned to the hospital a week later as an outpatient and was again hypnotized. He was told that he was aboard a sub which was surfacing and then asked, "What do you see?" The patient then acted out his part of a sea battle in which his submarine had surfaced in the midst of an enemy convoy. Torpedo after torpedo was aimed by the patient (hence the counting mentioned previously).

Finally the order was given to submerge and the patient was left in the conning tower to secure the outer hatch. The mechanism was jammed and the submarine submerging as the patient worked furiously on the hatch which was finally secured and the patient collapsed in utter exhaustion. At all times the patient had remained under control of the therapist's voice, apparently identifying it as the voice of his commanding officer.

It was planned to repeat this session if needed but it was not necessary as no more dreams or other symptoms occurred and had not returned over several months' follow-up.

Comment

This case demonstrates the relief which may follow the "abreaction" of reliving such traumatic episodes in which the patient is released from the discomfort arising from having had such experiences. This also serves to demonstrate the ease and simplicity of treatment of such combat neuroses and the apparent permanence of the "cure" with minimal treatment.

Thus far there have been presented examples and some discussion of the three groups of cases in which the author feels hypnosis has most practical value. Attempts have been made to apply this technique to many other psychiatric disorders, and in no other type has it been felt that results by hypnotherapy were comparable to results which could be obtained by other methods. In one case encountered which was treated by hypnotherapy by the author it was felt that some damage may have been done, contrary to the experience of Dr. Erickson.[6] In this case, of a Japanese youth of borderline intelligence and long-time maladjustments, his symptoms were apparently crystallized by hypnosis. Several cases have been seen by both Major Kartchner[5] and myself in which we have felt that definite damage has been done by over-

[5] Kartchner, F. D. and Korner, I. N.: The use of hypnosis in the treatment of acute combat reactions, Am. J. Psychiat., 103:630 (Mar.) 1947.

[6] Erickson, M. H.: Hypnosis in medicine, Med. Clin. North Am., May, 1944.

enthusiastic use of hypnotism, not, however, by physicians. These most frequently have been persons who have become anxious following a failure of the hypnotist to produce results which had been optimistically promised.

The extravagant claims which have been made for hypnotherapy, as well as its use by charlatans and for amusement, have led the medical profession to distrust a technique which has a definite usefulness. We must be as objective as possible in evaluating any given mode of treatment in order to avoid discarding the good along with the bad. There has been a constant tiny trickle of literature on hypnotherapy through the recent years but it has certainly not been accepted generally. It may be that the impetus given to acceptance of the technique by its success in military psychiatry will once again put hypnosis "on the map."

Conclusion

Hypnotherapy has a definite usefulness in the treatment of conversion hysteria, certain psychosomatic disorders and the combat neuroses. Its indiscriminate use may sometimes be harmful. It is felt that it should be given a place along with the other psychotherapeutic techniques as a valid treatment procedure.

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[EDITORIALS]

LET'S LOOK TO THE RECORD

The medical profession of the United States, which includes that of the Territory of Hawaii, is engaged in a deep-dyed plot inimical to the public health and welfare and deeply rooted in professional selfishness.

This would appear to be the conclusion Michael M. Davis, Ph.D., attempts to hammer home in an article, "Skirmish in Hawaii" recently published in *Survey Graphic,* and condensed under the title, "Amid Shouts of Red," in the December issue of *Hawaiian Digest.* Mr. Davis is chairman of the executive committee of the Committee for the Nation's Health, the foremost lay organization agitating for socialized medicine in the United States; and he has long been closely and at times officially connected with the little group within the government whose propaganda activities on behalf of the socialization of medicine were revealed in House Report No. 786 (by the Committee on Expenditures in Executive Departments) to the last Congress. His article deals with the defeat of the so-called "compulsory sickness insurance" measure during the last session of the Hawaiian legislature.

In Mr. Davis' article, members of the medical profession recognize at once the "smear" technique so widely, and to some extent effectively, used against them by proponents of socialized medicine.

At first the profession was inclined to laugh off the "smear," believing that the public would not be misled and would remember the profession's long and honorable record in the field of health and public welfare, and its accomplishments in developing in America, including Hawaii, the finest standards of medical care.

Lately, doctors have begun to wonder. Seldom adept at singing its own praises, the profession has permitted the public to forget or ignore its good works. But not for a moment have the socializers permitted the public to forget that the medical profession, *for selfish and scurrilous reasons,* has opposed their type of health program. (As Mr. Davis puts it in *Hawaiian Digest:* . . . "how a health program for the people of Hawaii caught the eagle eye of organized medicine of the U.S. mainland and how a flying squadron was sent to make sure that the creeping precedent in the Pacific died before it could walk.")

For the sake of the record:

Organized medicine and individual doctors representing their profession in Hawaii, have, unselfishly and unstintingly, supported and cooperated in every measure and program to reduce illness, to improve the public health, and to provide better medical care.

Their opposition to socialized medicine is not inconsistent with this record, for the profession is convinced that socialized medicine will not reduce illness, will not improve the public health, and will not provide better medical care.

As the public's doctors, they reject the prescription, not for selfish reasons, but because of their conviction that it is bad for the patient. This, Mr. Davis and the socializers know. This is why discrediting American medicine has been part of their program.

The medical profession believes it has earned and is entitled to the confidence of the public not only because of individual service to individual patients, but because it has generously participated

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in developing and maintaining public health measures reaching into the lives of every individual.

Here is a partial list of activities which owe much of their success to the active cooperation of organized medicine with the Territorial Board of Health and other organizations working for the public good:

1. Infant care program, to which the Territory's most satisfactory infant morbidity and mortality record can be directly traced.

2. Maternity care program, with an equally laudable record.

3. Anti-tuberculosis program, which has had the active support of organized medicine from its inception.

4. Cancer control activities, even now gathering momentum under guidance of the Territorial Medical Association.

5. Leprosy control activities, long of special interest to the Territorial Medical Association and a group of its members.

6. Communicable disease control activities. The original mass immunization of children against diphtheria, which has practically eliminated this disease from the Territory, was the result of teamwork between the Board of Health and the entire territorial medical profession.

7. Mental health program. This has always had the full support of the medical profession.

8. Health education.

9. Services to those unable to pay: In homes, hospitals, offices, out-patient clinics without remuneration, to the end that no person any place in the Territory may need to go without medical care for want of funds.

10. Services on consultant staffs of Leahi, Kaneohe and Kalaupapa hospitals, without remuneration or for token payment.

11. Development of plans for spreading of the costs of medical care. The Hawaii Medical Service Association, a non-profit voluntary health insurance plan, is the medical profession's answer to the compulsory sickness tax proposal.

12. Hospital development. Organized medicine's insistence upon high hospital standards throughout the Territory, and its continuous efforts to maintain these by service on hospital boards and committees.

13. Legislative guidance. Advice of the medical profession is sought by lawmakers at each session of the Legislature, and the legislative committee of the Territorial Medical Association has invariably made "what is good for the public"—not the selfish ends of the profession—the basis for its advice. This applied to its advice on socialized medicine.

14. Services and influence with Territorial Board of Health, Public Health Committee of Chamber of Commerce, Oahu Health Council, social agency boards, and hospital committees and boards—all striving to improve the public health picture in Hawaii.

15. War Services. No profession made a greater contribution nor greater sacrifices than did the doctors.

These are just a few of the medical profession's contributions to the health and welfare of the people of Hawaii, contributions that cannot be measured in dollars and cents. Attention is called to the fact that NONE of these activities of the profession augments the doctor's income. To the contrary, EACH of them tends to reduce sickness, and caring for the sick is the doctor's bread and butter.

Believe it or not: Doctors participate in such activities because the profession, by and large, recognizes that its obligation "to prolong life and relieve suffering" transcends any monetary considerations incident to the practice of medicine.

Doctors believe the public knows this to be true, but as long as Michael Davis and his cohorts continue to "smear" the profession to further their own ends, perhaps a reminder, now and then, is in order.—L.G.P.

REPLY TO "SHENANIGAN IN HAWAII"

Dr. Lyle G. Phillips
Hawaii Medical Journal
Honolulu, T. H.

My Dear Doctor Phillips:

As a member of the Territorial Medical Association I respectfully request that my answer to your editorial, "Shenanigan in Hawaii," in the November-December JOURNAL be published and distributed to the same membership that received the very unfair attack upon myself and other members of the Hospital Service Study Commission. The tone was so much in line with the editorials in the C.I.O's "Dispatcher" that I was ashamed that our official publication should descend to such tactics. Is there no longer a place for a difference of opinion in our society?

I worked on the Commission for one and a half years, and I wish to assure you that no one member of the committee was a rubber stamp for any idea or for any person. The deliberations were sincere, and there was a very honest difference of opinion between members on many points, but no personal animosity developed. Many community leaders including medical men were asked to give their opinions.

Doctor Sinai was brought to Honolulu only after careful analysis of a number of possible candidates

whose work and study gave them a right to have an intelligent opinion regarding the subject we were commissioned to study. He was chosen because his experience gave him a greater fund of knowledge than any other candidate. I have known Doctor Sinai for a good many years, and although we differ in some of our concepts I have always found him to be a gentleman and a scholar. He is interested in the welfare of people. He is a true liberal, but by no stretch of the imagination is he a communist. When our society smears him as such, then anti-communist propaganda becomes sheer witch hunting. Although Doctor Sinai believes that eventually we may have to accept some form of complete medical coverage, some of the members of the Commission did not agree with that opinion, and complete sickness insurance was not included in the bill that was proposed.

It is recognized that the medical society supports through compulsory taxation the free care of the people in the Territorial Hospital for the insane, the free care of citizens in tuberculosis hospitals, and the free care for crippled children which work is also supported by a per capita tax on Shriner members. (These patients are not given free choice of hospital or physician.) It supports free care for people who can not afford to pay doctors; hence, it did not seem to me, as a member of the profession, that the idea of supporting general hospitals was very much out-of-line with accepted policy. The facts showed that these hospitals with their expensive equipment are very much desired by everyone, but the facts also showed that only ten per cent of the population—those incapacitated by severe illness —pay for the upkeep of these expensive institutions. This cost includes the cost of nursing schools as well as the cost of educating young doctors. It did not seem one had to reach to Moscow for an idea of such service. Does it seem very unjust that a part of hospital costs should be carried by the total community? The entire community certainly benefits by the hospital just as much as it benefits by the fire department and the schools which are covered by general taxes and paid for by everyone who can afford it.

The bill which was not a "Sickness Tax" suggested payment of a certain part of hospital costs. It would not have interfered with the present practice of medicine, but it would have helped to lower the rapidly rising cost of being sick. It would have helped to neutralize some of the demand for socialized medicine, which some members of the Commission believed would be definitely detrimental to the attainment of the best medical care for our citizenry.

Your method of personality attacks and the use of half truths only lowers the standing of the profession, and to publish them in the Journal of the society lessens the dignity of the profession. Too many good citizens have expressed their disgust at some of the tactics used by the profession in this campaign to allow me to accept unquestioningly that "we" really did win. "We, the physicians," must beware that we do not become intolerant, bigoted and deny the right of a difference of opinion to our members. Dictatorship in any form endangers freedom. It should be abhorred whether in the C.I.O. or in a medical society.

The fact that no further answer was given by the committee members is also misconstrued in the editorial. The job of the Governor's Commission was to make a study and report the findings to the legislature. This was done after careful deliberation and the gathering of much factual data. The majority of the Commission believed that the job of selling the bill to the public did not lie within the scope of their appointed task. They were direct and sincere in doing the best job of which they were capable. I presented the bill in detail before the medical society and was given a very courteous and fair hearing. As soon as I had presented it, my job was completed. I regret that the official publication of our medical society failed to show the same courtesy and respect for an honest difference of opinion.

The publication of this letter will correct erroneous impressions which may have resulted from your editorial.

NILS P. LARSEN, M.D.

Dec. 29, 1947

Published herewith is a letter from Dr. N. P. Larsen in regard to the JOURNAL'S comment on Michael Davis' *Survey Graphic* article, "Skirmish in Hawaii."

It would seem the JOURNAL'S editor erred in assuming that all members of the Hospital Service Study Commission had awakened to the fact that Nathan Sinai, Davis' colleague, had, to use an apt expression, "sold them a bill of goods," in the recommendation for a "compulsory health insurance" law for Hawaii.

It appears from Dr. Larsen's letter that such may not, in every instance, have been the case.

LYLE G. PHILLIPS, M. D.
Editorial Director

HANDSOME IS AS HANDSOME DOES

"Improved public relations through improved public service" is the keynote of the new public relations program of the Colorado State Medical Society. It is so commonsense and realistic that it might well be made the keynote of any and every public relations program. If you want to be liked—be likeable!

The Rich Associates were employed in December, 1946, to diagnose the Society's troubles. They presented, in May of 1947, a 19-page report which included the following 20 recommendations:

1. *Investigate complaints of overcharging, and punish doctors found guilty of it.*
2. Stop "overselling" Colorado Medical Service plans.
3. *Permit C.M.S. to insure persons in higher income brackets.*
4. Add nonsurgical items to the C.M.S. plan.
5. *Formulate uniform average fee schedules and publish them.*
6. *Discipline members for professional misconduct.*
7. Educate physicians in physician-patient relations.
8. Engage actively in study and solution of public health problems.
9. Unify members by having a maximum number of doctors engaged in studies of special medical problems.
10. Unify the component societies by annual conferences, and elect their officers right after the annual State Society meeting (*not approved*).
11. Plan the work of committees each year in advance.
12. Have the Society's Executive Secretary administer and coordinate the Public Relations Program.
13. Have a Field Secretary to service the county societies.
14. Have a Committee or Program Secretary to service the various committees.

15. Have one, and later two, competent stenographers.
16. Make only short-term arrangements for publicity service.
17. *Encourage the press to quote Society officers, but maintain the usual reticence on matters relating to private practice.*
18. Use radio in the public relations program.
19. Appoint or elect a Publicity Chairman for every city or town having a newspaper or radio station.
20. Conduct a publicity and information program by means of: a mimeographed *newsletter;* monthly *press releases; radio talks* on medical care and public health problems; spot radio "health tips"; regular *conferences with lay organizations;* regular affiliations with such organizations; *open meetings of the Society* for press and lay leaders; periodic feature stories on society activities; and periodic conferences with special groups on special health problems.

A proposal that state-wide "disease detection centers" be established for the systematic detection of various sorts of illness was rejected by the Society as too radical a departure from present methods of medical practice.

A detailed report of the acceptance of the bulk of the above recommendations, plus some additional proposals for directing the Society's activities, is contained in the December, 1947 issue of the *Rocky Mountain Medical Journal.* Some of the noteworthy additions were: The decision to use all the Society's influence to prevent the exclusion of any reputable licensed physician from the use of any public or private hospital; a move to study specialization and try to improve relations between specialists and general practitioners; expansion of the *Rocky Mountain Medical Journal* to include a section devoted to medical economics and medical sociology.

The Rich recommendation relating to self-discipline has been vigorously implemented by a twelve-doctor Board of Supervisors, empowered to receive from any doctor or layman either written or oral complaints and, when indicated, to initiate investigations and prefer complaints against erring physicians, either before the Board of Censors of a component county society, or before the Board of Councillors of the State Society, or before the State Board of Medical Examiners or any criminal court. No longer must charges be made in writing and by a member of the Society — a provision which virtually insures that charges will rarely if ever be made.

It is too early yet to judge ultimate results; but already the program has earned the Colorado State Medical Society enthusiastic acclaim all over their own state and even nationally. Many lay organizations have already begun to request and accept advice from the medical society in various matters. An enormous amount of excellent publicity has been obtained. And certainly the "public relations" of the C.S.M.S. have never been at a higher peak. *Handsome is, as handsome does!* And perhaps, also, *a word to the wise . . .* H.L.A.

THE G.P. RIDES AGAIN!

Specialists have again become a bit of a nuisance. The practice of official certification, the willingness of insurance plans and the Veterans' Administration to reimburse specialists more liberally, and the over-anxiety of hospitals to staff themselves with specialists, have all conspired to create, and widen, a breach between the general practitioners and the specialists. Dr. P. S. Irwin, elsewhere in this issue, discusses the pros and cons of the question at length, and properly urges that steps be taken to correct the bad features of the existing situation.

General practitioners may be heartened somewhat, however, by a few paragraphs in the *British Medical Journal* in which the formation of an association of general practitioners is announced. The purpose of the organization is stated to be to defend the general practitioners against the injustices inflicted on them by the powerful specialist organizations, the Royal College of Surgeons and the Royal College of Physicians in particular. There is food for thought in the article; and the most thought-provoking thing about it is the date of its appearance. *It was published in 1886.*

THE HAWAII CANCER CONTROL SOCIETY

The Hawaii Cancer Control Society was formally established on January 20, 1948, after a series of organizing meetings arranged by Dr. Grover Batten, chairman of the Cancer Committee of the Hawaii Territorial Medical Association, Mr. Carl Flath, Administrator of The Queen's Hospital, and Mrs. Virginia Nelson, now with the local chapter of the American Red Cross but formerly engaged in the organization of cancer control societies throughout California. The new organization is an independent one, and its purpose is to promote the control of cancer through lay and professional education and the establishment of a diagnostic and consultative tumor clinic. Headquarters have been secured for the new organization at 1136 Punchbowl Street.

President of the Society is Mr. Alexander S. Atherton; the first vice-president is Dr. Harry L. Arnold, Jr.; second vice-president is Mrs. Virginia Nelson; Mr. Carl Flath is the secretary, and Dr. Laurence Wiig is the treasurer. An executive committee of four physicians and three laymen (plus the president and second vice presi-

dent ex officio), and a board of directors of 17 doctors and 16 lay men and women, comprise the nucleus of the organization. Opportunity for enrollment of members will be offered in connection with the drive for funds, which is to be held April 20 to 31.

The aims of the Hawaii Cancer Control Society are practical and praiseworthy, and deserve everyone's wholehearted support. Join the Society yourself, and help by advising your friends and your patients to join it, and to maintain their membership and their interest during the years to come. We won't stop cancer in a year, or in five; but we can slow it up a lot if we unify our efforts through an organization like the Hawaii Cancer Control Society.

"LOOK" AT THE NEWER OBSTETRICS

Look magazine continues to do a good job of medical press-agentry in its issue of February 17, with an article on the teamwork between obstetricians and anesthesiologists in producing better and safer obstetrical care. The implication that childbirth should always be completely painless, after the initial discomfort, is perhaps a little carefree and unqualified; but in general the article is couched in sufficiently general terms to discourage invidious comparisons between hypothetical deliveries and real ones.

Illustrations and descriptions of a new rigid plastic hood, for administration of oxygen to infants, may create a little demand for such equipment in advance of the supply. Whether the hoods are in production yet, or not, is not indicated.

THE MENTAL HYGIENE SOCIETY

It has now been well established in the minds of all people that physicians, dentists, nurses, and hospitals firmly believe in the principle of the superiority of voluntary health agencies and organizations. They look to us for leadership in health.

Since one person out of twenty is at some time a patient in a mental hospital, one of our greatest problems has been our Territorial Hospital, mental clinics, and preventive work in mental health. In recognition of this need, Dr. Ebaugh was brought here in 1937 by the Territorial Medical Association and the Public Health Committee of the Chamber of Commerce to survey our problem and make recommendations.

Six years ago one of his most important recommendations was realized; the Mental Hygiene Society of the Territory of Hawaii was organized, a voluntary agency run by a board composed of doctors, nurses, ministers, teachers, lawyers, health workers, social workers, and interested lay people. It was run with voluntary help for four years, when an executive secretary was employed who is trained in the field of psychiatric education.

This little group has done yeoman work. They have been in the legislature working for better laws and for financial support for mental institutions, clinics, and rehabilitation. They have worked with the facilities which we already have to raise standards and make their work more effective. They have worked days and evenings to educate such groups as university and high school students, parent teacher groups, church groups, and the general public. They maintain an up-to-date lending library of pamphlets and publications which are available to any interested person or group. They act as a referral agency for anyone with emotional problems. They are dedicated to the principle upon which all mental hygiene societies have been founded; to remove any stigma from patients with mental illness.

Here is an organization which belongs to us. Its work is vital in the health program of our Territory. It must be supported and it must be used, unless we are willing to deny our belief in the power and superiority of voluntary organizations and fail our people in leading them towards better health.

SOUR POI IS SAFER THAN SWEET

Don't refrigerate poi! It's safer after souring for a few days at room temperature than it is when it's fresh. This is the conclusion reached by Fung and Bushnell as the result of a bacteriologic study of poi and bacterial pathogens, reported elsewhere in this issue of the JOURNAL.

The gist of the matter is that any pathogenic bacteria in poi are killed rather rapidly after a couple of days at room temperature, presumably by some bactericidal substance produced in the course of the fermentation of the poi. Thus, if there is any dangerous bacterial contamination of the poi at the time it is purchased, it will usually be gone within a few days—*unless* you've kept the poi in the refrigerator!

It's just another instance of science finally proving that grandmother was right, after all! She never did hold with sweet poi.—H. L. A.

WELCOME, "ST. FRANCIS HOSPITAL CLINICAL FINDINGS"

A new medical periodical, the *St. Francis Hospital Clinical Findings,* makes its appearance with

the January, 1948 issue. Published in a simple and attractive format, with clean Gothic type, it is printed on the Mainland and distributed free of charge to a mailing list of over a thousand doctors and heart clinics in the Territory and on the Mainland. It is planned to publish it at irregular intervals, perhaps three to six times a year, as cases are offered for publication.

LOOK REPORTS ON "THE TRAITOR WITHIN"

The Traitor Within is the title of a new educational movie on cancer prepared by John Sutherland Productions for the American Cancer Society. In *Look's* February 17 issue, the film is reviewed with two pages of reproductions from the movie's stylized diagrams and cartoons. These present in the simplest possible terms the basic facts about cancer: What cells and tissues and organs are; what mitosis is; how cancer cells differ in behavior from normal cells; where and how the commoner cancers begin; and how they may be suspected, diagnosed, treated, and—if taken early enough—cured.

SODIUM TETRATHIONATE NOT DANGEROUS

The decision of the Council on Pharmacy and Chemistry of the American Medical Association announced in the March 8 issue of the *Journal of the American Medical Association* that "use of Tetrathionate in medicine should be abandoned" because of its nephrotoxic effect has been sharply questioned, if not actually contradicted, by Dr. Frank V. Theis and Dr. Geza de Takats in letters published in the July 26 issue of the *J.A.M.A.* The decision of the Council had been based on animal experiments, using approximately thirty-five times the clinical dose. Apparently the value of the drug in thromboangiitis obliterans, thrombophlebitis and other diseases with tendency for vascular obstruction is ample to justify the minimal risk that appears to be involved by its use.

FRANK FARROW SIMPSON, M.D. 1868 - 1948

Frank Farrow Simpson was born in Laurens, South Carolina, April 2, 1868. He received an A.B. from the University of South Carolina in 1889, and an M.D. from the University of Pennsylvania in 1893. He then served as an interne in the Mercy Hospital, Pittsburgh, from 1893 to 1894, following which he practiced medicine at Spartanburg, South Carolina, for one year, returning to Spartanburg in the fall of 1895 to become the assistant of Dr. X. O. Werder, gynecologist at Mercy Hospital, in which capacity he continued for eight years.

He became assistant gynecologist at the Mercy Hospital in 1901 and then became gynecologist to the Allegheny General Hospital from 1904 to 1916, and consulting gynecologist of Columbia Hospital from 1905 to 1909. He taught clinical gynecology at the University of Pittsburgh from 1909 to 1913. He joined the American Gynecology Society in 1907, became its vice president in 1915 and served as its president in 1917, becoming Honorary Fellow of the society in 1927.

He was a member of the Southern Surgical and Gynecological Association, American Gynecological Club, American College of Surgeons, American Association of Obstetricians and Gynecologists, American Medical Association, Medical Association of the State of Pennsylvania, Allegheny County Medical Society, and Pittsburgh Academy of Medicine; Vice President, American Association of Obstetricians and Gynecologists, 1905; President, Pittsburgh Academy of Medicine, 1907; Secretary general, and member executive council, Seventh International Congress for Obstetrics and Gynecology, 1912; Chairman, Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, 1912; member, executive committee, Section Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, 1913-1916; Executive Committee, American Society for the Control of Cancer; Treasurer, Committee of American Physicians for the Relief of the Belgian Profession, 1914; member, Board of Regents, American College of Surgeons, 1916; secretary and member of executive committee, Committee of American Physicians for Medical Preparedness; Chief of Medical Section, Council of National Defense, 1917-1918; Chief of Section of Medical Industry, War Industries Board, 1917-1918; and Lieutenant Colonel, Medical Corps, U. S. Army. He was one of the founders of the American College of Surgeons.

He made numerous contributions to the scientific literature of his specialty, that of gynecology. Significant among his early reports he was among the first to recognize that the omission of surgery for acute pyosalpinx saved many lives. Prior to his discovery the operative mortality rate in women with acute pyosalpinx was 20 per cent. He was also the inventor of a wide variety of surgical instruments and appliances, many of which are still in common usage by gynecologists over the world and many of these instruments bear his name. He was always a genial and scholarly gentleman, as

all who knew him will acknowledge. Even though he had been retired from the active practice of medicine and surgery for many years, to converse with him was to be convinced that he continued a very keen interest in the developments of surgery and the affairs of the American College of Surgeons and other organizations in which he maintained membership and high honor.

We physicians here in Hawaii mourn his loss. His counsel and guidance in the successful organization of the Pan-Pacific Surgical Association was invaluable. His wide acquaintance with prominent surgeons throughout the world made his advice and services of inestimable value and his natural ability for organization helped us to successfully hold three meetings of the Pan-Pacific Surgical Association here in Honolulu.

Therefore, Mr. Chairman, in view of the aforementioned, as secretary of the Hawaii Chapter of the American College of Surgeons, I offer the following resolution by the Committee on Necrology:

RESOLUTION

Whereas, Frank Farrow Simpson, one of our most respected colleagues, has passed into the great beyond, and

Whereas, throughout all of his life he has devoted his skill and science to the practice of his specialty in medicine, and

Whereas, his services and kindnesses to the sick public have over the years been given unstintingly, unselfishly and graciously, ofttimes at the expense of his own physical well-being, and

Whereas, by his good works, his exemplary character, his gentleness and his high ideals, not only as a doctor of medicine but as a man and a citizen of this community he has earned the title and the right to be known amongst us as one of our foremost leaders, and

Whereas, social and professional contact with him has created complete confidence, trust and friendship by the younger and older members of the profession alike,

NOW THEREFORE BE IT RESOLVED, that the Hawaii Chapter of the American College of Surgeons spread all of the foregoing on the minutes of our records and that a copy of this resolution together with the preamble be furnished the widow, Mrs. Ruth Ring Simpson, and other members of his family with an expression of deep sympathy to them in their loss.

FORREST J. PINKERTON, M.D.
Secretary, Hawaii Chapter
American College of Surgeons
J. E. STRODE, M.D.
R. O. BROWN, M.D.
Committee on Necrology

February 12, 1948

MANUSCRIPT SERVICE, INC.

As an aid to busy physicians who desire to have help in writing medical papers, the above service has been formed and its facilities are available at their office, 6432 Cass Avenue, Detroit 2, Michigan. They will suggest methods of collecting and assembling clinical records and experimental data, suggest organization of the manuscripts, the format of tables, the types of illustrations, as well as correct grammatical and typographical errors, check references, prepare manuscripts for publication in specific journals, etc.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 257th regular meeting of the Hawaii County Medical Society was called to order by Dr. S. Mizuire at 7:30 p. m. at a dinner meeting at the Hilo Yacht Club on November 6, 1947.

Those present were: Drs. W. Bergin, L. Bernstein, S. R. Brown, M. H. Chang, M. L. Chang, W. T. Chock, H. Crawford, L. Fernandez, R. Filmore, S. Haraguchi, H. Ireland, S. Kasamoto, W. Loo, S. Mizuire, A. Orenstein, T. Oto, C. Phillips, L. L. Sexton, H. M. Sexton, G. Tomoguchi, T. Woo, H. Yuen, D. Depp, S. Miyamoto and four guests including Drs. Faus, Palma, M. Gerundo, and Quisenberry.

A communication from Dr. H. Johnson was read concerning his proposed visit to Hilo on November 12, 1947. Dr. Orenstein moved that Dr. Johnson see only those cases referred to him by physicians in Hilo and follow-up cases of his own. Also that this Society welcome his visit and that he use whatever space at the Hilo Memorial Hospital can be obtained for him. The motion passed unanimously following a second by Dr. L. L. Sexton.

The physical examination form of the Vocational Rehabilitation Service was explained. A fee of ten dollars per examination was suggested and approved. This would include a urinalysis as well as a serological test.

It was announced that all physicians of the Hawaii County Medical Society were invited to the dinner meeting on December 6 at the Volcano House to hear Dr. Sterling Bunnell who is to be the guest speaker at the Territorial Plantation Physicians Association meeting.

Dr. M. Gerundo reviewed the idea of the tumor clinic and requested the approval of the Society.

Dr. Quisenberry of the Territorial Board of Health was introduced to the Society. He supported the idea of the tumor clinic and stated that the Board of Health was willing to help the clinic in any way possible and with as much financial aid as possible. Financial aid would depend on what arrangements could be made by the Society. Dr. Quisenberry stated that cancer was the second highest cause of death in the Territory as well as on the mainland. Twelve out of every hundred deaths were due to cancer. More complete diagnosis, more numerous autopsies, as well as the longer life span of individuals may account for the apparent increase in the number of cancer patients. The Board of Health was mainly interested in the preventive angle and early diagnosis of cancer. Thus they will help in the educational program as well as with consultations. Patients always referred to their own private physicians. Dr. Quisenberry presented a very interesting film on the early detection of cancer.

Dr. A. Orenstein moved, Dr. Yuen seconded that the Hawaii County Medical Society go on record as favoring the idea of the establishment of a tumor clinic and that the president appoint a committee to work with Dr. Gerundo in its formation. Motion passed unanimously.

Dr. Quisenberry suggested that it might be a good idea if the Hawaii County Medical Society should sponsor a lay organization to promote the cancer program whose function would be to raise funds to help finance an educational program as well as the running of the tumor clinic. If such a program was instituted it could work in conjunction with the Territorial Society.

It was suggested that the same committee work on this program in connection with the tumor clinic.

Dr. Faus suggested that a Woman's Auxiliary be formed of doctors' wives to help in the educational program. The assessment of $75.00 paid by physicians in the Territory is less than half that paid in California for the same job. He stated that there were one hundred per cent paid on Kauai, all but two on Maui, and sixty not paid in Honolulu to date.

Dr. J. Palma, who is intimately connected with both the Hawaii Medical Service Association and the Medical Economics Committee, was introduced. He stated that all other physicians were spending much more for this new field of public relations and that we should go along. Doctors talking with their patients day after day is good but apparently is not enough.

Dr. Palma stated that we in the Territory are following the pattern of the AMA and other Societies. In spite of what we may think of the radio programs the people apparently like them.

Dr. Palma reviewed the history of the Hawaii Medical Service Association, stating that they learned as they went along. He stated that the Hawaii Medical Service Association plans to introduce two basic policies for the Territory. (1) A hospital policy alone and (2) a catastrophic illness policy to cover hospital and surgery. Both policies to be offered to people below a certain earning capacity—probably $2,500. Those with incomes over $2,500 will be able to join but must pay the difference of a higher cost to both the doctor and hospital.

Much discussion followed. Dr. H. Yuen asked if the Hawaii Medical Service Association was alarmed at the apparent great number of subscribers to Mutual of Omaha. Dr. Palma answered in the negative because they too were selling patients against socialized medicine.

Dr. Orenstein stated that we all agree that we do not want socialized medicine but the question was how to combat it. Propaganda thus far is not apparently doing it and the HMSA is too limited.

Dr. Faus stated that the Medical Economics Committee agreed with this view and requested more assistance from the individual doctors.

* * *

The 258th regular meeting of the Hawaii County Medical Society was called to order by President Dr. S. Mizuire at 7:30 p. m. at the staff room of the Hilo Memorial Hospital on December 13, 1947.

Those present were Dr's M. H. Chang, M. L. Chang, W. T. Chock, H. Crawford, L. Fernandez, S. Haraguchi, S. Kasamoto, W. Loo, S. Mizuire, A. Orenstein, C. L. Phillips, L. L. Sexton, H. Sexton, W. Seymour, G. Tomoguchi, T. Woo, H. Yuen, R. Miyamoto, and two guests, Dr. Gerundo and Dr. J. Boog.

The meeting was then turned over to Dr. Michele Gerundo who conducted a one hour tumor clinic. Three interesting cases were presented.

A letter from Dr. R. O. Brown accepting our invitation to be guest speaker in the near future was read.

An application for membership of Dr. E. B. Cunningham was presented as having passed the Board of Censors and tabled for one month. The Society unanimously accepted the application by secret ballot.

A communication from Dr. R. N. Perlstein was read concerning the next annual meeting of the Hawaii Territorial Medical Association. A request was made for scientific papers to be presented at that meeting.

It was moved by Dr. W. Loo and seconded by Dr. Crawford that the treasurer be instructed to send $10.00 to the Tuberculosis Society of Hawaii for Christmas Seals. Motion passed unanimously.

The reading of a bill from the Territorial Medical Association for $3,000.00 started a round of discussion concerning various aspects of the Medical Economics Program.

Dr. Crawford moved and accepted Dr. Orenstein's amendment that the treasurer pay to the Territorial Medical Association monies collected from the members except for Dr. R. Arimizu who is excused because of illness. Also that the treasurer inform all members who have not paid to date that if the sum of $75.00 for the 2nd assessment is not paid by December 31, 1947, this amount shall be charged against them and they will be delinquent. Dr. M. L. Chang seconded. Motion passed unanimously.

Much discussion followed concerning the legality of the 2nd assessment. Dr. A. Orenstein moved, Dr. M. L. Chang seconded that this Society accept the special assessment of $75.00 for 1947 and that notices be sent to each member accordingly to be voted upon at the next meeting.

The subject of contribution to the Physicians Committee of Hawaii in support of the National Physicians Committee was discussed. It was decided that no action would be taken by the Society but that contributions should be left up to the individual. Although much was said of the good work done by the NPC no definite information could be obtained as to what they actually had done or what their actual function was.

Dr. A. Orenstein stated that he had paid the assessment for 1946 and 1947 because the Society had gone on record as accepting the assessments. However, he did not intend to pay the 3rd assessment, nor support the NPC blindly for the sake of the "cause" without knowing more definitely how the money was being spent and for what purpose. He stated that he would not conform to any type of socialized medicine.

The secretary was instructed to write for a copy of the constitution of the National Association of Physicians and Surgeons.

Dr. W. Loo moved, and Dr. C. L. Phillips seconded that the treasurer send $15.00 for a year's subscription to the news pamphlet published by Marjorie Shearon. Motion passed unanimously.

Dr. Phillips suggested that the secretary write to Dr. Izumi for more information about the NPC.

* * *

The 259th regular meeting of the Hawaii County Medical Society was called to order by President Dr. S. Mizuire at 7:30 p. m. at the Staff Room of the Hilo Memorial Hospital on January 15, 1948.

Those present were Drs. W. Bergin, L. Bernstein, S. R. Brown, M. L. Chang, P. Chock, H. Crawford, S. Haraguchi, S. Kasamoto, W. Loo, S. Mizuire, A. Orenstein, T. Oto, C. Phillips, L. L. Sexton, H. M. Sexton, D. Depp, R. Miyamoto, and B. Cunningham. Also present were Drs. Gerundo, Lynn, Mendenhall, Teagarden and V. Jim and Miss Murray.

The first hour was turned over to Dr. M. Gerundo who conducted the tumor clinic. Three cases were presented.

Dr. John G. Lynn, Chief of the Bureau of Mental Hygiene, was introduced. He gave a very interesting clinical history of a young woman with a split personality. Sound movies showing the four different personalities were shown. Dr. Lynn then presented a plan whereby his services might be more efficiently used on this island. He proposed three centers on the Island where patients may go for diagnosis as well as treatment. He suggested that the Hawaii County Medical Society set up a Mental Hygiene Fund to which patients may donate towards the increasing of facilities for diagnosis and treatment by the Mental Health Bureau. Electric shock therapy will be used when the machine is available.

Much discussion followed. Dr. A. Orenstein made a motion that the president appoint three doctors to study the problem submitted by Dr. Lynn and report their findings at the next meeting. Dr. L. L. Sexton seconded the motion; motion carried unanimously. Drs. Bernstein, Crawford and Orenstein were appointed.

An inquiry from Dr. Irwin of the Hawaii Medical Service Association concerning consultations on Hawaii Medical Service Association patients was read. The matter was discussed and it was felt that billing for consultations should continue as in the past. Also the secretary was to inform Dr. Irwin that according to the regulations set up by the Staff of the Hilo Memorial Hospital the charges for X-rays done in the hospital are less than the charges established by the Hawaii Medical Service Association. The doctor is then to charge the difference to HMSA for interpretation.

A resolution pertaining to the outlawing of biological warfare submitted by Dr. M. Gerundo was discussed. Dr. H. Crawford moved and Dr. W. Loo seconded that this Society go on record as strongly condemning any form of biological warfare. Motion passed unanimously. The secretary to so inform the Territorial Medical Association and the AMA.

A secret vote on the 1947 assessment was taken. The result was ten in favor and eight against. These votes included proxy votes.

Dr. L. L. Sexton presented copies of "Socialized Medicine" by Marjorie Shearon and suggested that they be given to influential business and civic leaders in Hilo. It was suggested that a committee be formed to look into the matter and report at the next meeting.

The bylaws and pamphlets of the Association of American Physicians and Surgeons were discussed. Dr. A. Orenstein moved that the same committee as above look into this matter. Motion seconded by Dr. L. L. Sexton and carried unanimously. Dr. Crawford suggested that the committee have an open meeting in the near future.

Drs. L. L. Sexton, M. L. Chang, H. Crawford and R. Miyamoto were named to act as the committee.

HAROLD M. SEXTON, M.D.
Secretary.

HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting of the Honolulu County Medical Society was held on January 9 in the Mabel Smyth Building at 7:30 p. m. Dr. Hill presided. There were 77 members and guests present.

The chairman welcomed two new members: Dr. Peter John Washko (transfer from Olmsted County Medical Society, Rochester, Minnesota) and Dr. Wallace S. Kawaoka (transfer from Kauai County Medical Society).

The actions of the Hawaii Territorial Medical Association Council meeting of January 5 were reported as follows:

A letter was read from Smith, Mansfield, in which they acknowledged sole responsibility for numbering the return envelopes for the questionnaire. The resignation of Smith, Mansfield agency as of January 31 was accepted. The Public Relations and Medical Economics Committee was given a vote of confidence and was authorized to continue a modified program until the annual meeting in May. It was agreed between the Council and the Committee that the modifications would consist of elimination of the stuffer sheets, the radio programs and the newspaper column. The Council decided to employ one additional secretary in the office of the Hawaii Territorial Medical Association in order to continue the operations of the public relations program from that office. It was decided, because of the inadequate response to the referendum vote on the assessments, to re-submit them to referendum. Therefore a second ballot would be circulated which would not call for a signature and would not be "keyed."

The chairman read the following recommendation of the Committee on Forms of Medical Practice which will be circulated among the membership:

The Committee on Forms of Medical Practice has recommended that no arbitrary regulations concerning the form or frequency of appearance of professional announcements in newspapers should be undertaken by this Society. However, it was their feeling that most physicians would welcome specific recommendations regarding such announcements. The following recommendations of the Committee on Forms of Medical Practice have been approved by the Board of Governors:

1. SIZE: It is recommended that the ad be not more than two columns wide and that its depth be limited to two inches, with an allowance of an additional inch if space is needed for proper additional information.
2. SIZE AND STYLE OF TYPE: The type used should not be larger than 20 point and a relatively plain font is recommended. No ornamentation of the advertisement other than a simple "border" outline should be used.
3. CONTENTS: (a) The names of physicians may be indicated by either "Dr." or "M.D."
 (b) No other degrees or alphabetical qualifications, such as F.A.C.S., should be employed and no memberships in professional or other organizations should be mentioned.
 (c) No reference should be made to specialization except: (1) In announcements of the opening of a new practice, or a limitation of practice, or the inception of a new professional association; and (2) such reference should be designated by the phrase "practice limited to" rather than "specialist" or "specialty."
 (d) The address, telephone numbers and office hours may be mentioned.
 (e) Notices of resumption of practice (e.g., following illness, vacation or postgraduate study), or change of address or telephone number, should not contain any mention of limitation of practice or specialization.
4. SCHEDULE OF INSERTION OF ANNOUNCEMENTS: It is suggested that only one announcement should appear each day in any one paper for a period of not longer than one week.

The chairman reported that the Board of Governors had recommended and approved the employment of an additional secretary in the office of the Honolulu County Medical Society because of the great increase in the amount of work done in that office. This action was ratified by a unanimous vote of the members present at this meeting.

Announcements were made of coming meetings, including Dr. P. J. Flagg's course in Pneumatology, the Surgical Society meeting, and the Pan Pacific Surgical Conference to be held in Honolulu August 30 to September 13.

The program consisted of four papers presented by the Leahi Hospital Staff: Tuberculosis Control, by Dr. Marks; The Therapy of Minimal Tuberculosis, by Dr. Ito; Modern Sanatorium Treatment of Tuberculosis, by Dr. Perlstein; and Histoplasmosis and Coccidiomycosis—Incidence of Infection in Hawaii, by Dr. Paynter. Dr. Cloward also presented a case report: Prefrontal Lobotomy for Relief of Pain.

Refreshments were served following the scientific session.

* * *

The Honolulu County Medical Society met in the Mabel Smyth Auditorium on Friday, February 6, 1948, at 7:00 p. m. Dr. Hill presided. There were 74 members and guests present.

A paper entitled Observations on Work in Antibiotics was presented by Max Levine, Ph.D. Dr. Morton E. Berk reported on an unusual case of gout. Dr. Alvin V. Majoska discussed the Medico-Legal Aspects of Autopsies.

Dr. Majoska's paper was followed by a discussion of the problems presented. Dr. Childs moved that a copy of Dr. Majoska's paper be sent to Governor Stainback accompanied by a letter requesting the appointment of the committee recommended in his speech; also that a copy of the paper be sent to the President of the Health Department, the President of the Hawaii Territorial Medical Association, and the President of the Honolulu County Medical Society; also that at the next business meeting of the County Society a report should be given as to progress made. This motion was seconded and passed.

Dr. Phillips, as the representative of this Society on the Medical Economics and Public Relations Committee, reported on the activities of that committee. He announced that the 1946 and 1947 assessments had been approved by the membership, but the 1948 assessment was voted down. The Committee feels that a substantial sum must be set aside for any contingency arising at the time of the next legislative session. Therefore, the present program must be curtailed. Until the annual meeting in May, the public relations program will be carried on as follows: The medical profession of Hawaii will be kept posted on matters pertaining to medical economics and medical legislation. Marjorie Shearon's releases will be given as wide circulation among the doctors as possible. The *California Public Relations News* will be mailed to the members of the Medical Association. This will be furnished to us by the California Society free of cost. A mailing list of four or five hundred names of officers of every possible interested organization in the Territory is being prepared. In Los Angeles, said Dr. Phillips, the accusation was made against the medical profession that there was a widespread practice of accepting rebates for glasses, laboratory fees, etc. The Public Relations Committee felt that the proper procedure was to take the initiative in investigating this activity in Hawaii. The Committee

recommended to the Board of Governors of this society that the Better Business Bureau of Honolulu be requested to determine whether the practice of rebates was common in Hawaii. The Board of Governors was convinced that such a move would improve public relations, and acted upon the recommendation immediately. A new Territorial Medical Association program is being broadcast weekly on station KGU. The radio station has given the time free at a good hour (Monday evening from 9:30 to 10:00) as a community service. We pay only the basic cost of transportation, transcription, etc., which will amount to about $15.00 a week for 26 weeks.

A welcome was extended to the new members: Dr. Raymond C. Dusendschon (by transfer from Maui), Dr. Kwai Sung Chang and Dr. Alfred H. Lui. Dr. Paul Wiig, a visitor from Reno who formerly practiced here, responded to the greetings of the Society.

At the close of the scientific session, refreshments were served.

* * *

The Honolulu County Medical Society held a special meeting at Mabel Smyth Auditorium on Friday evening, February 20, when they had the privilege of seeing and hearing the fine color movies taken by Dr. Clarence Fronk on his hunting trip in Africa, and by Dr. Nils P. Larsen and Dr. P. H. Liljestrand on their recent vacation in Alaska. The doctors brought their wives and children and nearly filled the auditorium. An audience of 292 were present.

Dr. Hill presided. Following the movies, the chairman extended an invitation to all doctors interested in art to meet in the lounge. This group then formed tentative plans for an organization to be known as the Hawaii Physicians' Art Association.

Dr. and Mrs. Larsen, Dr. and Mrs. Liljestrand, and Dr. and Mrs. Fronk were hosts for a very enjoyable social hour with refreshments for all.

SAMUEL L. YEE, M.D.
Recording Secretary.

KAUAI COUNTY MEDICAL SOCIETY

The meeting was called to order by Dr. Toney at 7:45 p.m. January 14, 1948, at the Wilcox Memorial Hospital. Members present were Doctors Toney, Cockett, Wallis, Fujii, Kuhns, Liu, Masunaga, Brennecke, and Wade. Dr. Robert E. Faus, President of the Territorial Association, Dr. Joseph Palma, member of the Medical Economics Committee, and Dr. Robert J. M. Horton, Board of Health Medical Officer, were present as guests.

Dr. Horton called the attention of the members to the fact that there is no laboratory technician at the Board of Health Laboratory in Lihue, Kauai, since the marriage of Miss Kay Young. Through the kindness of the Mahelona Hospital Staff, all Board of Health laboratory procedures performed in Lihue in the past are to be performed at the Mahelona Hospital laboratory until a new laboratory technician is appointed from a long list of applicants.

Dr. Toney informed the members and Dr. Faus that Child Health and Maternal Health Clinics were including too many private children and mothers who were financially able to go to their private physicians. After some discussion, no action was taken.

Dr. Toney inquired of the members, as well as of Dr. Faus, as to the duties of the government physician. Dr. Kuhns called Dr. Toney's attention to the "Revised Instructions" issued to all government physicians and registrars by the Board of Health. The last copy of this booklet was issued in 1943 by Dr. Charles L. Wilbar, Jr., M.D., president of the Board of Health. The members voted to have the secretary write a letter to Dr. Charles Wilbar for further information on this subject, and that a copy of this 1943 issue was to be sent to the Hawaii Territorial Medical Association.

Dr. Toney called the attention of the society to the antiquated system of socialized medical care furnished the welfare patients by the government physicians on Kauai. The government physicians unanimously voted to resign their positions, although to continue to take care of indigent patients until reorganization could be initiated. They voted to have the secretary write a letter to the other county medical societies concerning their action, and hoped the other government physicians in the territory would follow suit.

The secretary read a letter from the Medical Director of the Hawaii Medical Service Association dated December 19, 1947 concerning the medical and surgical fees established by the Kauai County Medical Society. The members voted for the secretary to answer this letter with the notation that there is no separate fee schedule for the local county, but that the members were using the Hawaii Medical Service Association fee schedule for its members and the Hawaii Medical Service Association fee schedule for veterans, and industrial accident fee schedule of the Honolulu County Medical Society.

The secretary called the attention of the members to a circular of information furnished by the department of the United States Army in which the surgeon general offered appointments into the Army Medical Corps, graduate training in specialties, and openings for residents and internes in their hospitals.

Dr. Horton mentioned that the Tuberculosis Survey of the island of Kauai was to commence in January 1948, and would include all adults over the age of fifteen.

Dr. Toney called the attention of the members to the Pineapple Medical Plan offered by the Hawaii Medical Service Association which should be started just as soon as Mr. Arthur Achor returns from the mainland.

Dr. Joseph Palma discussed the medical economics questionnaire letter recently received by the members of the local society from the medical economics committee. He stated that this letter was sent by the Smith-Mansfield & Cummins Advertising Agency with the stamps on each envelope numbered in order that they might determine those that did not mail in their questionnaire. According to him and also explained by a later letter from the agency dated January 3, 1948, this procedure is an accepted practice to key returns in any type of open poll.

Dr. Palma also brought up copies of two letters written by Dr. William F. Leslie to Dr. F. J. Pinkerton concerning Dr. Leslie's personal opinions with regards to the donations for the Physician's Committee of Hawaii, a recent radio broadcast by the Spearhead for Americanism and other matters pertaining to the pros and cons between government medicine and the private practice of medicine.

Dr. Wallis moved that the Kauai County Medical Society, through its secretary, write a letter to Dr. F. J. Pinkerton, president of the Medical Economics Com-

mittee of the Hawaii Territorial Medical Association that this county medical society is one hundred per cent with him and all of his policies.

Dr. Faus discussed an emergency medical plan for physicians to participate in. The program of this plan is based on what to do in case of another war. He hoped that this program would be carried out in the near future, which would consist of first aid instruction to school students and parent-teacher group discussions on other medical subjects. The members of the Kauai County Medical Society unanimously voted approval of this plan.

A three-reel movie entitled "Eclampsia" was shown the members through the courtesy of the Wyeth Company.

The meeting was adjourned at 10:00 p.m.

* * *

A regular meeting was called to order by Dr. Toney on February 11, 1948, at 7:45 p. m. at the Wilcox Memorial Hospital, Lihue. Members present were Doctors Wade, Masunaga, Brennecke, Kuhns, Wallis, Fujii, Toney, and Cockett. Doctors Horton, Goodhue, and John G. Lynn were present as guests. The secretary read the minutes of the previous meeting.

The government physicians of the island of Kauai proposed the following plan to replace the previous plan of operation followed by all government physicians:

(a) That all patients under the Department of Public Welfare were to be treated by physicians of their choice under a "fee for service" basis.

(b) That the duties of the registrar were to be performed by the assistant registrar (administrative clerk) for a fixed salary. The government physician is to relinquish his obligations and services under this new system and every physician will participate in the treatment of the indigent patients.

Dr. Wallis condemned the arrangements made in the bringing of Dr. Paluel Flagg for demonstration of Anesthesiology and made a motion, which was seconded and unanimously passed by the members, that the secretary-treasurer be responsible for all arrangements of bringing of visiting physician lecturers in the future without interference by the other members.

On motion of Dr. Wallis, duly seconded by a unanimous vote of the members, it was ordered that the secretary-treasurer contact Dr. Bernard Schultz of the Honolulu County Medical Society in order to arrange for his visiting the Kauai County Medical Society at one of its future meetings to enlighten the members on the Science of Cardiology.

A letter of application submitted by Dr. William Goodhue was passed favorably by the Board of Censors and he will be voted in at our next medical meeting. The Board of Censors, in capacity of the nominating committee, submitted the following list of officers for the year 1948-49 to be elected at our next medical meeting: For President, Dr. Patrick M. Cockett; for Vice-President, Dr. Eichi Masunaga; for Secretary-Treasurer, Dr. William Goodhue; for Delegate, Dr. Marvin Brennecke; for Alternate Delegate, Dr. Webster Boyden; and for Board of Censors, Dr. Jay Kuhns.

Dr. John G. Lynn, psychiatrist for the Territorial Board of Health, Bureau of Mental Hygiene, inquired of the members as to whether they would want their mental patients who want shock treatment treated at the hospitals or at the dispensaries. The members left this matter up to the discretion of Dr. Lynn. Dr. Lynn stated that these electric-shock treatments can be given either at our hospitals, dispensaries, or at our private offices, providing there was a bed and an attendant available. Dr. Lynn gave a short case history, which was shown by a movie, on one of his patients with personality deviation.

PATRICK M. COCKETT, M.D.
Secretary-Treasurer.

* * *

KAUAI COUNTY MEDICAL SOCIETY
Lihue, Kauai, Hawaii
February 19, 1948

Government Physicians
Hawaii, Maui & Honolulu
County Medical Societies

Dear Sirs:

The government physicians of the island of Kauai at the February 11, 1948, Kauai County Medical Society meeting unanimously went on record to resign their positions, providing the majority of the other county government physicians also resigned. They also recommended the following changes in the present system to replace the former:

(1) Fee For Service and Professional Care of Welfare patients with indigents having free choice of physician from county medical associations.

(2) Administrative duties of government physician as registrar to be performed by assistant registrar for a fixed salary.

Although this change will cost the Territory of Hawaii government a lot of money, it is a better system of care for the indigent patients and doctors providing same.

Sincerely,

PATRICK M. COCKETT, M.D.
Secretary-Treasurer
Kauai County Medical Society.

MAUI COUNTY MEDICAL SOCIETY

A dinner meeting of the Maui County Medical Society was held at the Kula Sanatorium at 6:00 p.m., November 11, 1947. Present were Drs. Frank St. Sure, Jr., presiding; Cole, Burden, Beland, Rockett, Izumi, Sanders, Patterson, McArthur, Shimokawa, Fleming, Tompkins, Lightner, Underwood, Edward Kushi, A. Y. Wong, Harold Kushi and Kanda.

Dr. Patterson gave a brief report of the First Aid Committee of the Maui County Fair. He stated that this year the first aid at the fair was in charge of the Puunene Hospital staff. He also stated that the first aid facilities at the fair grounds were inadequate.

Action: Dr. Patterson made a motion that the Maui County Medical Society go on record as recommending that a small building be erected and equipped by the Maui Fair and Racing Association in the fair grounds to be used for first aid purposes. It was seconded by Dr. McArthur. The secretary was instructed to send a letter to the Maui Racing and Fair Association to this effect.

A letter from Dr. Lewis E. Shapiro concerning a fee for insurance examinations was read. He stated that the late issue of *Medical Economics* showed that the medical men of Tennessee have taken action to raise

the fee to $10.00. He wondered if something could be done by our society to do likewise.

Dr. Fleming suggested that Dr. Bunnell be approached to see whether he could pay us a visit and at the same time address the Maui County Medical Society. It was suggested that the secretary write to Mrs. Bennett to see when Dr. Bunnell will be available to address the Maui County Medical Society.

Dr. Patterson suggested having Dr. Harry Arnold, Jr. here to conduct a skin clinic and it was also suggested that each member of this society contact the secretary and give the approximate number of cases to be seen by Dr. Arnold.

Dr. Sanders made the following motion: Resolved that the By-laws of the Maui County Medical Society be amended at the next regular meeting, raising the annual dues from $25.00 to $35.00 for the year beginning 1948. It was seconded by Dr. Fleming.

Following the business meeting, very interesting chest cases with x-ray findings were presented by both Dr. Tompkins and Dr. Beland of the Kula Sanatorium.

Note: The members of this society wish to thank the medical staff of the Kula Sanatorium for the use of their hospital for our meeting, and also for the cocktails and the wonderful dinner served.

The meeting was adjourned at 10:00 p.m.

* * *

The regular dinner meeting of the Maui Medical Society was held at the Grand Hotel at 6:30 p.m., January 20, 1948. Members present were Dr. Frank St. Sure, Jr., presiding; Drs. Izumi, Patterson, A. Y. Wong, Kashiwa, Tompkins, Dunn, Rockett, McArthur, Sanders, Burden, Harold Kushi, Beland, Cole, Reppun, Shimokawa, Underwood, Fleming and Kanda. Guests present were Dr. Hatt, Dr. Haywood, Mr. Ifversen, Mr. Taliaferro and Dr. Lightner.

After dinner, the program chairman, Dr. Cole, introduced Mr. Ifversen, who acquainted us with the Hawaii Medical Service plan that is being introduced to the people of Maui. This plan is to cover employed groups and their families in a prepaid hospital and medical insurance. Mr. Ifversen introduced Mr. Taliaferro to the members of the Society and explained that he was the representative of the H. M. S. A. on Maui. The association of the H. M. S. A. with the Blue Cross and Blue Shield organizations was explained. Also, it was explained that Dr. Irwin, the Medical Director of the H. M. S. A., was paid by the Territorial Medical Association and the H. M. S. A. The ten per cent deduction from bills was explained, and it was the hope of Mr. Ifversen that the deduction could be lowered to the vicinity of two per cent in a very short time because running expenses had been held to such a low level.

Mr. Ifversen urged that the physicians get their bills out to the H. M. S. A. as soon as possible because until these bills are submitted, the hospital bills are delayed. He also said that a revised medical fee schedule was being prepared, and also, that a larger first fee or "nuisance fee" of $5.00 was being proposed because of the large amount of paper work involved with reports being made out to the H. M. S. A.

A general discussion of the relative merits of the H. M. S. A. plan and the United Benefit Association H. G. E. A. plan was held for a few minutes in which various members of the Society participated. It was the general feeling that we physicians should push our H. M. S. A. plan and not buck the United Benefit plan even though the relative cost of that plan was far above the H. M. S. A. plan.

Dr. Cole then introduced our guest speaker of the evening, Dr. Hatt of the Shriner's Hospital in Honolulu, who spoke to us very informally and instructively on "Slipped Epiphysis of the Head of the Femur."

A popular talking movie on early diagnosis of cancer was shown after which the business part of the meeting was conducted.

The treasurer's report was read which showed a balance of $493.00 in the treasury after the Territorial assessment had been paid. In view of the fact that the treasury had such an unexpected surplus, Dr. Sanders rescinded his proposed amendment to the By-laws of raising the annual dues from $25.00 to $35.00.

Dr. St. Sure appointed a committee of Drs. Sanders, McArthur and Izumi to meet with the H. M. S. A. representatives to act as an advisory group.

A Nominating Committee consisting of Dr. Tompkins, chairman; Dr. Harold Kushi and Dr. Burden was appointed.

Dr. Sanders gave a lengthy report on Medical Economics Committee and the recent ballots that had been sent out for members to sign and return. He explained the code numbers under the stamps and explained that they had been placed there by the agency, Smith-Mansfield, and were not the doing of the Medical Economics Committee. He explained that the Smith-Mansfield Agency had severed its connections with the Medical Economics Committee as of the first of February. It seemed that the coding of the return envelopes was "the straw that broke the camel's back" even though no one could see any crime in the coding of the envelopes in as much as the ballots were signed. Dr. Sanders urged all of the physicians to vote on the second ballot that was being sent out on the Special Assessment for 1946, 47 and 48. He explained that this ballot was not to be signed.

Dr. Sanders said that Dr. McArthur had been appointed to the Golf Committee of the Territorial Medical Society. Also, Dr. Sanders said that eighty physicians had donated $5,000.00 to the National Physicians' Committee.

T. W. KANDA, M.D.
Secretary-Treasurer.

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RECENT ACQUISITIONS

Family Ethics

Bowman, H. A. *Marriage for moderns.* c1942. (From Bureau of Mental Hygiene.)
Levy, John *The happy family.* c1938. (From Bureau of Mental Hygiene.)
Nimkoff, M. F. *The family.* c1934. (From Bureau of Mental Hygiene.)
Richardson, H. B. *Patients have families.* c1945. (From Bureau of Mental Hygiene.)
Russell, Bertrand *Marriage and morals.* c1929. (From Bureau of Mental Hygiene.)

Mental Hygiene

Anderson, C. M. *Emotional hygiene.* 3rd ed. rev. c1943. (From Bureau of Mental Hygiene.)
Beers, C. W. *A mind that found itself.* c1944. (From Bureau of Mental Hygiene.)
Burnham, W. H. *The normal mind.* c1924. (From Bureau of Mental Hygiene.)
Groves, E. R. *Understanding yourself.* Rev. ed. c1941. (From Bureau of Mental Hygiene.)
Kraines, S. H. *Managing your mind.* c1943. (From Bureau of Mental Hygiene.)

Neurology and Psychiatry

Bochner, Ruth *The clinical application of the Rorschach test.* c1942. (From Bureau of Mental Hygiene.)
Cameron, D. E. *Objective and experimental psychiatry.* 2nd ed. c1941. (From Bureau of Mental Hygiene.)
Ebaugh, F. G. *Psychiatry in medical education.* c1942. (From Bureau of Mental Hygiene.)
Fetterman, J. L. *The mind of the injured man.* c1943. (From Bureau of Mental Hygiene.)
Gordon, R. G., ed. *A survey of child psychiatry.* 1939. (From Bureau of Mental Hygiene.)
Harrower-Erickson, M. R. *Large scale Rorschach techniques.* c1945. (From Bureau of Mental Hygiene.)
Kardiner, Abram *The traumatic neurosis of war.* c1941. (From Bureau of Mental Hygiene.)
Lewis, N. D. C., ed. *Modern trends in child psychiatry.* c1945. (From Bureau of Mental Hygiene.)
Lewis, N. D. C. *A short history of psychiatric achievement.* c1941. (From Bureau of Mental Hygiene.)
Miller, Emanuel, ed. *The neuroses in war.* c1940. (From Bureau of Mental Hygiene.)
Oberndorf, C. P. *The psychiatric novels of Oliver Wendell Holmes.* c1943. (From Bureau of Mental Hygiene.)
White, W. A. *Lectures in psychiatry.* c1928. (From Bureau of Mental Hygiene.)
White, W. A. *Outlines of psychiatry.* 12th ed. c1929. (From Bureau of Mental Hygiene.)
Williams, T. A. *Dreads and besetting fears.* c1923. (From Bureau of Mental Hygiene.)
Witmer, H. L. *Psychiatric clinics for children.* c1940. (From Bureau of Mental Hygiene.)

Psychology

Adler, Alfred *Understanding human nature.* c1927. (From Bureau of Mental Hygiene.)
Dewey, John *Human nature and conduct.* c1922. (From Bureau of Mental Hygiene.)
Kellogg, V. L. *Mind and heredity.* c1923. (From Bureau of Mental Hygiene.)
Menninger, K. A. *The human mind.* 2nd ed. c1937. (From Bureau of Mental Hygiene.)
Prince, Morton *The unconscious.* c1914. (From Bureau of Mental Hygiene.)
Robinson, J. H. *The mind in the making.* c1921. (From Bureau of Mental Hygiene.)
Schilder, Paul *Mind.* c1942. (From Bureau of Mental Hygiene.)

Social Psychology

Aptekar, H. H. *Basic concepts in social case work.* c1941. (From Bureau of Mental Hygiene.)
French, L. M. *Psychiatric social work.* c1940. (From Bureau of Mental Hygiene.)
Garrett, Annette *Interviewing; its principles and methods.* c1942. (From Bureau of Mental Hygiene.)
Hamilton, Gordon *Theory and practice of social case work.* c1940. (From Palama Clinic.)
Lowrey, L. G. *Psychiatry for social workers.* c1946. (From Bureau of Mental Hygiene.)
Lowry, Fern, ed. *Readings in social case work; 1920-1938.* c1939. (From Palama Clinic.)
Reynolds, B. C. *Learning and teaching in the practice of social work.* c1942. (From Bureau of Mental Hygiene.)
Robinson, V. P. *A changing psychology in social case work.* c1930. (From Bureau of Mental Hygiene.)
Robinson, V. P. *Supervision in social case work.* c1936. (From Palama Clinic.)
Robinson, V. P., ed. *Training for skill in social case work.* c1942. (From Bureau of Mental Hygiene.)
Swift, S. H. *Training in psychiatric social work.* c1934. (From Bureau of Mental Hygiene.)
Taft, Jessie, ed. *A functional approach to family case work.* c1944. (From Bureau of Mental Hygiene.)
Towle, Charlotte *Social case records from psychiatric clinics.* c1941. (From Bureau of Mental Hygiene.)
Witmer, H. L. *Social work.* c1942. (From Bureau of Mental Hygiene.)
Young, P. V. *Interviewing in social work.* c1935. (From Palama Clinic.)

Young, P. V. *Social treatment in probation and delinquency.* c1937. (From Bureau of Mental Hygiene.)

Miscellaneous

Alexander, H. L. *Synopsis of allergy.* 2nd ed. c1947. (Gift of publisher.)
Cook, Donald *Ulcer.* c1946. (Gift of author.)
Goldwater, S. S. *On hospitals.* c1947. (From Hospital Association.)
Gross, Martin *Acetanilid.* c1946. (Gift of publisher.)
Mercer, Walter *Orthopaedic surgery.* 3rd ed. 1944.
Quarterly cumulative index medicus. v.40. July-Dec. 1946. c1947.
Taussig, H. B. *Congenital malformations of the heart.* c1947.

The Medical Library wishes to acknowledge the gift from Dr. Paul Wiig of a two-year subscription to the *Journal of the International College of Surgeons.* Dr. Paul was here visiting his brother, Dr. Laurence Wiig and spent a short time in the Library looking over our collection. The Library particularly appreciates this interest on the part of a visiting surgeon, who practiced on Maui and in Honolulu prior to the war.

MISSING COPIES, FRED IRWIN LIBRARY
Hilo Memorial Hospital

The following issues of journals are needed to complete the files in the Fred Irwin Memorial Library at Hilo Memorial Hospital. Please look around to see if you have any of them available, and turn them in to the Honolulu County Medical Library if you have.

American Heart Journal.....Vol. 29 No. 2 (Feb.) 1945
American Journal of Clinical Pathology.....Vol. 10 No. 1-6 (Jan.-June) 1940
Vol. 11 No. 1-6 (July-Dec.) 1940
Vol. 12 No. 1-3 (Jan.-Mar.) 1941
American Journal of the Medical Sciences.....Vol. 162 No. 2-3, 6 (Aug., Sept., Nov.) 1921
Vol. 164 No. 1, 3-5 (July, Sept., Oct., Nov.) 1922
Vol. 169 No. 1 (Jan.) 1925
Vol. 173 No. 1-6 (July-Dec.) 1927
American Journal of Nursing.....Vol. 28 No. 8-11 (Aug., Nov.) 1928
Vol. 33 No. 3, 4 (Mar., Apr.) No. 7-11 (July-Nov.) 1933
Vol. 38 No. 2 (Feb.) 1938
Vol. 39 No. 4 (Apr.) 1939
Vol. 44 No. 9 (Sept.) 1944
American Journal of Obstetrics and Gynecology.....Vol. 47 No. 3 (Mar.) 1944
Vol. 48 No. 1 (July) 1944
American Journal of Ophthalmology Vol. 27 No. 1-12 (Jan.-Dec.) 1944
American Journal of Roentgenology & Radium Therapy.....Vol. 47 No. 2 (Feb.) 1942
Annals of Internal Medicine.....Vol. 14 No. 4, 6-8 (Oct.) 1940
(Dec.) 1940, (Jan. & Feb.) 1941
Vol. 15 No. 3 (Oct.) 1941
Archives of Dermatology & Syphilology.....Vol. 23 No. 1-6 (Jan.-June) 1931
Vol. 24 No. 1-6 (July-Dec.) 1931
Vol. 33 No. 1-6 (Jan.-June) 1936
Vol. 34 No. 1-6 (July-Dec.) 1936
Vol. 35 No. 1-6 (Jan.-June) 1937
Vol. 36 No. 1-6 (July-Dec.) 1937
Vol. 37 No. 1-6 (Jan.-June) 1938
Vol. 38 No. 1-6 (July-Dec.) 1938
Vol. 39 No. 1-6 (Jan.-June) 1939
Vol. 40 No. 1-6 (July-Dec.) 1939
Vol. 41 No. 1-6 (Jan.-June) 1940
Vol. 42 No. 1-6 (July-Dec.) 1940
Vol. 43 No. 1-6 (Jan.-June) 1941
Vol. 44 No. 1-6 (July-Dec.) 1941
Vol. 45 No. 1-6 (Jan.-June) 1942
Vol. 46 No. 1-6 (July-Dec.) 1942
Vol. 47 No. 1-6 (Jan.-June) 1943
Vol. 48 No. 1-6 (July-Dec.) 1943
Archives of Pathology.....Vol. 1 No. 1-6 (Jan.-June) 1926
Vol. 2 No. 1-3 (July-Sept.) 1926
Vol. 4 No. 5 (Nov.) 1927
Vol. 13 No. 1-6 (Jan.-June) 1932
Vol. 14 No. 1-6 (July-Dec.) 1932
Vol. 15 No. 1-6 (Jan.-June) 1933
Vol. 16 No. 1-6 (July-Dec.) 1933
Vol. 17 No. 1-6 (Jan.-June) 1934
Vol. 21 No. 2-6 (Feb.-June) 1936
Vol. 23 No. 1-2 (Jan.-Feb.)
No. 4-6 (May-June) 1937
Vol. 24 No. 1-2 (July-Aug.) 1937
Vol. 25 No. 1,3-6 (Jan., Mar.-June) 1938
Vol. 26 No. 1-6 (July-Dec.) 1938
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BOOK REVIEWS

Synopsis of Obstetrics. By Jennings C. Litzenberg, B.Sc., M.D., F.A.C.S. Third Edition. 416 pp. with 157 illustrations, including 5 in color. Price $5.00. The C. V. Mosby Company, St. Louis, 1947.

This book is just what the title states. It is a new edition of an excellent compend which is extremely useful for medical students, residents and interns, and those studying for state, national, or American Board examinations.

In addition it is an invaluable reference book for all practicing obstetricians, particularly for those who have little leisure time for keeping up with current medical literature. So many compendia are outdated by the time they go to press; in general, such a statement cannot be made about this volume. It is of particular excellence in its detailed clarification of that complex subject, the relation of the Rh factor to pregnancy. This topic is reviewed so well that the book is worth owning for the data on this subject alone. The more recent concept of diabetes in pregnancy is well handled. Antibiotics in puerperal infections are well discussed, though streptomycin is not mentioned.

Caudal anesthesia is discussed critically, giving attention to its good points as well as the bad. Other anesthetic agents are discussed, with their uses. The topic of spinal anesthesia is avoided. It is to be hoped that this will be included in the next edition. "Saddle block" is not mentioned.

On the whole it is a well worth while book that should be in wide use.

H. E. Bowles, M.D.

Acetanilid—A Critical Bibliographic Review. By Martin Gross, M.D. 155 pp. Price $3.00. Hillhouse Press, New Haven, 1946.

For those who wish to acquire historical background and have a complete summary of practically all past experimental and clinical data regarding a single drug—acetanilid—which has already fallen more or less into disuse among the profession, this is an excellent and painstaking piece of work.

The bibliography is 30 pages long, covers 763 publications, and includes works published as far back as 1853. The drug was first discovered in 1852.

All conflicting data as to pharmacology, toxicology, clinical uses, etc., are presented in an unbiased way and it is largely left up to the reader to draw his own final conclusion.

This is a commendable piece of research and excellent for those with a historical turn of mind. However, it is doubtful whether it will be of any benefit to those in the active practice of medicine.

Robert Y. Katsuki, M.D.

Synopsis of Allergy. By Harry L. Alexander, A.B., M.D. Second Edition. 255 pp. C. V. Mosby Co., 3207 Washington Boulevard, St. Louis 3, Mo., 1947.

This small volume, prepared principally for the busy practitioner, is a compact treatise on the subject of allergy, completely up-to-date including the latest information on newer drug therapy.

Dr. Alexander in his brilliant style covers the fundamentals of the subject in concise clear-cut fashion, easily understood by medical student as well as by practitioner. His development of the entire subject under the various subheadings of allergy is illustrative of his many years as clinician and teacher. Facts are poignantly presented with sufficient detail to acquaint the uninitiated with all essential matter for carrying out basically sound therapy.

The book fulfills the statement in its first preface, "to present the subject of allergy in terms of present-day thought." It is a small volume that should be on the "handy" shelf of the library of every busy medical man.

Tell Nelson, M.D.

Ulcer. By Dr. Donald Cook, B.A., M.D. 187 pp. with 27 illustrations. Medical Center Foundation and Fund, Chicago 2, Illinois. 1946.

This treatise, by Dr. Donald Cook, is written primarily to postulate a new theory for the cause of peptic ulcers. It is written entirely from a surgeon's point of view. The postulates are those that a surgeon would make, since he deals entirely with an anatomical basis for 98.3 per cent of all ulcers. This author believes that this vast majority of ulcers, both duodenal and gastric, are due to pinching of the mucosa, and pressure and irritation in the hepatovertebral notch. He reviews most of the classical literature and, if one can overlook the theories in this book, there is a fairly good review of the modern management of peptic ulcers from both the medical and surgical standpoint.

The book is conspicuous by its omission from its list of good references, of those references which have added so much to our understanding of the physiology of the stomach and ulcer and which will stand out through time as classic medical literature. I refer especially to the work of Beaumont upon Alexis St. Martin and recently the work by Wolf and Wolff in 1942, which has added much to the understanding in regard to emotion and its effect on the physiology of the gastrointestinal tract and its susceptibility to injury.

L. Clagett Beck, M.D.

Collected Papers of the Mayo Clinic and the Mayo Foundation. Volume xxxviii. 915 pp. Philadelphia and London. W. B. Saunders Company. 1947.

The current issue of the annual Collected Papers of the Mayo Clinic lives up to the same high standards of composition and contents as shown in the previous issues. This volume is somewhat larger than the volumes issued during the war when the number of contributions from the Mayo Clinic necessarily was limited.

The outstanding contributions in this issue concern themselves with medical and surgical conditions of the gastric intestinal tract in which diseases the Clinic has most extensive experience. Their views on vagus nerve surgery are set forth as well as several contributions on surgery of the pancreas. The new clinical syndrome of chronic relapsing pancreatitis is well presented.

There are several new procedures presented in the genito-urinary disease, including articles on the value of transurethral resection for "cord bladder." Under blood and circulatory organs are included the methods and results of the use of anticoagulants, the trend being in favor of these drugs rather than surgical ligations in cases of venous thrombosis. The surgical treatment of myasthenia gravis by thymectomy is well presented. There are a number of articles on the use of streptomycin, including its use in tuberculosis. Many other valuable articles in all fields of medical and surgical specialties are presented, the above citations being examples of what one might encounter.

This book can be highly recommended to the general practitioner and the specialist alike because of its authoritative presentation of current thoughts and practices at the Mayo Clinic, in a clear cut, easily readable manner.

LAURENCE M. WIIG, M.D.

Textbook of Embryology. By Harvey Ernest Jordan, M.A., Ph.D., Sc.D. and James Ernest Kindred, M.A., Ph.D. Fifth Edition. 613 pp. Price $7.50. D. Appleton-Century Company, Inc., New York. 1948.

In this volume, an excellent standard text on embryology, with particular attention to the human embryo, is brought up to date. The studies made by Hertig and Rock on the very early fertilized human ova are incorporated in the work.

It is difficult for a physician in any particular field of medicine to know just how to review this book. There is scarcely a specialty of medicine where this excellent book cannot be used. A more thorough knowledge of diagnosis and therapy of many congenital anomalies is rendered possible. One can cite such entities as bronchogenic cysts, mediastinal and ovarian dermoid cysts, malrotation of the gut, circulatory system anomalies, spina bifida, and horse-shoe kidney, to mention a few.

It is impossible to have a comprehensive knowledge of any of these diagnoses, or of normal anatomical structures, without a good knowledge of embryology. The table of normal development after the first month (page 482) is an excellent reference summary.

The writers have included interesting early historical concepts of embryology, and obstetricians will profit by the chapter entitled Teratology and Eugenics. The book is an asset to any medical library.

H. E. BOWLES, M.D.

Occupational Medicine and Industrial Hygiene. By Rutherford T. Johnstone, A.B., M.D. 604 pp. 117 illustrations. Price $10.00. The C. V. Mosby Company, St. Louis, Mo., 1948.

The following quotations from this book indicate very well the increasing importance of industrial medicine.

"Will this book be looked upon as a collection of cold medical data or will he who reads it sense in it the poetry and romance of occupational medicine; will he recognize the story of great achievements, and the challenge to come into the arena where the fight is still on to make the life of these who toil worth living?"

". . . Will it be apparent to the medical profession that when the doctor offers and industry accepts an adequate industrial health program, the great mass of American citizens will never tolerate the political administration and control of their health? . . ."

"Although occupational medicine has been designated in recent years as a specialty, it is by no means a restricted specialism . . . (It) is not interested in the patient's eyes alone, or his allergy, or his heart. . . . It is interested in man and all that aids or hinders his welfare. . . . In the rise of preventive medicine, occupational medicine has assumed the foremost role."

". . . But occupational medicine recognizes that man's health and happiness are affected by many other factors such as nutrition, mental hygiene, housing, sanitation, recreation, noise, vibration, lighting, ventilation, atmospheric pressure, climatic changes, and a myriad of other influences."

The book includes an interesting history of the development of this specialty. All types of occupational hazards are very carefully analyzed, both as to their chemistry and the illnesses they might produce. Of local importance was the chapter on 2,4-D which has recently been used extensively in Hawaiian agriculture. This is the first, complete data we have been able to obtain on the nontoxicity of this amazing weed killer.

The book is an excellent reference for anyone interested in occupational hazards as well as being a good outline of how extensive pre-employment and periodic examinations should be. If the medical profession and industry will accept these recommendations, then, indeed, great progress in the health of the nation will result.

NILS P. LARSEN, M.D.

Introduction to Medical Science. By Gulli Lindh Muller, M.D., and Dorothy E. Dawes, R.N., M.A. Second Edition, illustrated. Price $4.00. W. B. Saunders Company, Philadelphia and London, 1948.

Here is a textbook that is an acknowledged pioneer in nursing education; a true evaluation is difficult since this is the only comprehensive nursing text offered in this field. This new edition is far superior to the former in its presentation and its organization which has in both editions closely followed the program outlined in the Curriculum Guide. It is written in simple language with a minimum of technical and scientific words and phrases. Factual data are authoritative and concise. A scientific concept of the fundamentals of nursing care and a deeper appreciation of the inter-relationship of the various professional groups orients the student nurse to the cause, diagnosis, basis of treatment, preventive measures, and methods of control. It is a survey of medical science and the principles involved as well as an integrating course for the basic sciences. Wisely, there is no attempt to cover all phases of medicine or all the various laboratory procedures, rather there is a selection of topics in accordance with their importance to nursing problems. Above all, it is a thoroughly modern text which with the exception of one or two unfortunate analogies is acceptable to schools of any denomination.

GERLIND I. HORST, R.N., B.A.

A Manual of Clinical Therapeutics—A Guide for Students and Practitioners. By Windsor C. Cutting, M.D. Second Edition. 712 pp. with 30 illustrations. Price $5.00. W. B. Saunders Company, Philadelphia and London, 1948.

This concise, well written handbook fills the need of the medical man who desires the most information with the least number of words, and acts as a suitable stepping stone between an intern's manual and a text-

book of clinical medicine. It is an excellent ready reference for facts and figures, such as normal laboratory constants and usual dosages of drugs. The appendix also contains a list which is rarely to be found in most clinical manuals, namely a list of fatal doses of various drugs and poisons. The volume is completely up to date and incorporates brief discussions on antibiotics and the use of BAL.

No attempt is made to discuss controversial issues and the discussion of each item is followed by at least one reference in the literature and further research may be carried on through various cross references derived from the one excellent reference given for each topic.

There are but few untoward criticisms to be made of the little volume, although the author does classify "indigestion" as a disease rather than a symptom or syndrome and still mentions the use of acacia in hypoproteinemia. However, it must be stated that the author simply mentions acacia and immediately advises against its use.

Although the second edition is 103 pages larger than the first, the physical dimensions of the book are smaller and the book is a worthwhile handbook for the busy general practitioner.

ALVIN V. MAJOSKA, M.D.

Introduction to Psychiatry. By W. Earl Biddle, M.D., and Mildred Van Sickel, B.S., R.N. Second Edition, illustrated. Price $2.75. W. B. Saunders Company, Philadelphia and London, 1948.

This is an excellent text and reference book for workers and students caring for psychiatric patients. It might almost be termed an Emily Post of psychiatric nursing, as it has all the answers. It tells what to do and say in the more common types of problems, emergencies and questions posed by patients to those in attendance, being complete and specific in telling how to deal with the various situations which can arise and result in catastrophe to patient and attendant, and lawsuit and litigation against the institution.

There is an unusually good cataloguing of the tests made in a neurological examination and their significance. Inductotherapy and other treatments are concisely and clearly described.

The book is slightly depressing, as it contains little of the bright optimism many writers express in recent literature on mental diseases. A few statements, such as "Radical alarmists and those who give detailed explanations to the patient usually arouse anxiety and may precipitate neuroses," sound somewhat overcautious and a bit pompous.

The student and teacher of psychiatric nursing will find this text invaluable in its completeness. It would take the beginning student hours and hours of reading and experience to find even a small per cent of the practical information so conveniently and logically organized in this most useful little volume.

ELIZABETH BROWN, B.S., R.N.

Handbook of Communicable Diseases. By Franklin H. Top, A.B., M.D., M.P.H., F.A.C.P., and Collaborators. Second Edition. 992 pp. 95 text illustrations and 13 color plates. Price $8.50. The C. V. Mosby Company, St. Louis, Mo., 1947.

This book is written as a reference book for physicians, nurses and other health workers who deal with communicable diseases. It is written in clear and concise English; and it is well indexed, so that a reference may be found with ease. The illustrations are particularly excellent.

As with any text or handbook, the length of time required to write it and to have it published means that developments within the last two years or so are not included. For instance, while streptomycin is mentioned as having some promise in the treatment of tuberculosis, the present day concept of its use in that disease is not included.

For some reason there is no mention in this handbook of anthrax or of plague. The chapter on poliomyelitis seems to take a level-headed approach, although the Sister Kenny theories regarding the treatment of this virus disease perhaps are given undue emphasis.

It is interesting to note Hawaii's connection with the writing of this handbook, in that one of the collaborators is Patience L. Clarke, now Director of Nursing at Leahi Hospital, and another is Laura E. Peck, former chief nurse at Palama Settlement. Dr. Bruce H. Douglas, who conducted a tuberculosis survey in the Territory before the war, collaborated in writing the chapter on tuberculosis.

C. L. WILBAR JR., M.D.

Minor Surgery. By Frederick Christopher, B.S., M.D., F.A.C.S. Sixth Edition. 1058 pp. with 937 illustrations. Price $12.00. W. B. Saunders Company, Philadelphia and London, 1948.

This book covers a wide set of subjects classified as minor surgery and has been designed and written for the general practitioner, surgical resident and intern. It has, since its inception, been one of the best volumes on minor surgery. It deals with the pathogenesis, diagnosis and treatment of a large majority of the common surgical afflictions that one sees and treats in the office and outpatient hospital dispensary.

The sixth edition has been thoroughly revised in an effort to bring it as much up to date as possible. Sections on open wounds, infections of the skin and subjacent tissues, burns and foreign bodies have been completely revised and brought up to date. Much valuable knowledge was gained in World War II, including the judicious use of the newer antibiotics, locally and parentally, in the treatment of infections and infected wounds. The lessons learned from this fund of material which has been collected and published in the past few years have been ably condensed and incorporated in this edition.

Every general practitioner and surgeon should have this book at his finger tips for ready reference.

HOMER R. BENSON, M.D.

Communicable Diseases for Nurses. By Albert G. Bower, A.B., M.S., M.D., F.A.C.P., and Edith B. Pilant, R.N. Sixth Edition. Price $4.00. W. B. Saunders Company, Philadelphia and London, 1948.

Twenty years is a long time in the life of a scientific book, so it must necessarily be a good one to be worth revising and re-publishing six times during that period. The new sixth edition of the well-known "Bower and Pilant" has acquired an up-to-date look in illustrations and content. Chemotherapy and treatments for both common and uncommon communicable diseases have been corrected to include the most recent advances.

Three new chapters have been added on Exanthem Subitum, Non-Syphilitic Venereal Lesions, and Relapsing Fever. This book is now a very satisfactory reference for practically everything of a communicable

nature. It should therefore be a valuable addition to any nurse library or to any nurse's private collection.

The chapters have been well organized for quick reading and comprehension and the text has been written in legible style. The illustrations have been considerably improved over those in previous editions, although a few old ones have survived the revision, to the general detriment of the sections they adorn. Charts, graphs and line-drawings are excellent.

Two good accessory parts at the end of each chapter are the sets of pertinent review questions and the lists of very well-selected references. Both questions and references cover the subject matter thoroughly and should be of great value to both student and instructor. The final glossary of medical terms is also particularly good.

Almost anyone could learn something of interest from this complete and authoritative textbook. We recommend it either for "refresher" reading or for extensive study.

PATIENCE L. CLARKE, R.N.

Practical Office Gynecology. By Karl John Karnaky, M.D. 261 pp. with 238 illustrations. Price $7.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1947.

This volume might well have been dedicated to that synthetic estrogen stilbestrol rather than the dedication the author gave it. The word stilbestrol will be found at least once on more than 50 per cent of the pages. There are 111 page references to it in the index. The author advocates the use of stilbestrol for virtually every obstetrical and gynecological ill and complication. Of course, there are exceptions, such as Trichomonas vaginalis, Monelia, and other specific infections. It is given by mouth, intra-muscularly and directly into the anterior lip of the cervix. No mention is made of its utilization by rectal suppository. The dosage is highly varied, from .1 mg. to 200 mg. per dose, according to the condition being treated. Stilbestrol is given *ad nauseam,* actually—and that is controlled by nembutal suppositories.

In treating threatened abortion the author states: "Stilbestrol should be administered in a large initial dose, as much as 100 mg. per os, followed by 25 mg. doses at fifteen minute intervals until pains, bleeding or both are stopped. Daily doses are required thereafter, of 10, 25 or 100 to 200 mg., depending upon the amount required to control pain, bleeding or both."

In case of incomplete abortion the author states dilatation and curettement is rarely indicated. The treatment of choice? You guessed it. Stilbestrol. The dosage —100 mg. orally at once and 25 mg. at fifteen minute intervals until the bleeding stops. In most such patients two 1/320 grains of ergotamine tartrate tablets were given with the first dose of stilbestrol and half this dose at intervals of two hours for the next thirty-six hours. It is made clear though that the latter drug is just a supplement to the stilbestrol therapy.

The author does state: "Use of stilbestrol is not advised in patients having a family history of cancer or a so-called precancerous lesion, except in instances of severe hemorrhage, the continuation of which means the inevitable loss of the life of the patient. Stilbestrol should not be used when there is a suspicion of cancer of the breast or when any lesion appears to be cancerous." Evidently it is still necessary to take a history and do a physical examination.

The physical properties of this book are excellent, i.e., binding, printing and paper. There are several beautiful illustrations in color, borrowed from the house organs of manufacturers.

FRANK C. SPENCER, M.D.

Textbook of General Surgery. By Warren H. Cole, M.D., F.A.C.S., and Robert Elman, M.D., F.A.C.S. Fifth Edition. 1160 pp. Price $11.00. D. Appleton-Century Company, Inc., New York, 1948.

This is a readable textbook of general surgery. It is written in a running monographic style without the incorporation of usual statistical data. Many of the subjects are discussed from an historical point of view with emphasis on physiology and pathology. This approach gives the reader a broader understanding of the subject matter, and encourages further collateral readings. Most of the literature up to 1945 is well covered, and adequate references to them are found at the end of each chapter; however, many of the more recent developments since that time are only casually referred to or are not mentioned. Some subject matters are only sketchily developed, but on the whole the book is well written, and informative.

Further development of the clinical aspects of diseases would have added to the value of the text. The text tends to stress the laboratory aspects of surgery, and neglects the bedside clinical surgery. Probably this is its chief shortcoming. Both authors have been prolific in their contributions to surgical literature for 15 to 20 years. Both are products of Evart Graham's surgical school. Graham with Berford has written the chapter an Surgical Diseases of the Chest. A chapter on Military Surgery has been written by Frank B. Berry. Sixteen other surgeons throughout the country were used in consultant capacities. It is probable that such a procedure delayed the actual appearance of the book, for many notable contributions of the past two or three years are not mentioned.

Chemotherapy with sulfonamides and antibiotics is concisely, but well presented. Excellent presentations of the diseases of gall-bladder and extrahepatic biliary passages are followed by an authoritative presentation of infections of pancreas, and a brief but adequate summary of the affections of the spleen. In the light of the developments since 1945, however, even these discussions appear inadequate and outdated. The more recent contributions of Blakemore regarding portal hypertension should be taught every medical student. Only sketchy references are found regarding the epoch-making contributions of Taussig and Blalock on the surgical correction of Tetralogy of Fallot, and those of Robert Gross and others on the anomalies of the thoracic great vessels, including those for correction of coarctation of aorta. Sweet, Ladd and Swensen's contributions to the surgery of the esophagus are provocative Surgery has taken an enormous stride because of these contributions; the possible implications of their effect on surgery as a whole is enormous.

S. YAMAUCHI, M.D.

Operative Gynecology. By Harry Sturgeon Crossen, M.D., and Robert James Crossen, M.D. Sixth Edition. 999 pp. 1334 illustrations. Price $15.00. The C. V. Mosby Company, St. Louis, Mo., 1948.

This new and completely revised edition lives up to the reputation of the other five editions as an excellent text and reference book for both the general practitioner

and the specialist. The authors not only consider their own pet methods of performing various operative gynecological procedures but also discuss in each category many other variations of operative technic, and evaluate their usefulness. They have drawn from their wealth of accumulated clinical experience in discussing such things as the indications for operation, the operative and non-operative prognosis, the cancer potential of various pelvic organs and how one's operative technic should be varied when confronted with the presence of other associated pathological conditions.

A real appreciation of the changes that have actually taken place in the field of operative gynecology can be obtained by comparing the first edition, published in 1915, with the present one. For instance, in the earliest edition the first 70 pages of the book were devoted to the subject of retrodisplacement of the uterus, and the authors sincerely stated, "Though for thousands of years women have suffered from these conditions, it is only within the last fifty years that methods really curative for the severe cases have been devised and put in use." This enthusiasm is lacking, however, in the present edition where this subject is relegated to a much less imposing location. Even then, however, it is felt that the 35 pages now devoted to it are too much. The subject of cancer of the uterus formerly occupied only 50 pages and of this 10 lines were devoted to cancer of the corpus uteri and radium therapy of pelvic malignancies, respectively. Concerning radiation therapy, the authors formerly stated, "The results have been such as to arouse a lively hope of permanent cure. The difficulty of radium therapy is that radium is not generally available." Yes, times have changed, with the emphasis of operative gynecology shifting from retrodisplacement to cancer.

This new edition, with its up-to-dateness and excellent discussions and demonstrations of what to do, when to do it and what might and could happen, makes it a text which, I feel, will be consulted frequently by both the specialist and those general practitioners who are definitely interested in the field of gynecology.

RODNEY T. WEST, M.D.

Synopsis of Neuropsychiatry. By Lowell S. Selling, M.D., Ph.D., Dr. P.H., F.A.C.P. Second Edition. 561 pp. Price $6.50 The C. V. Mosby Company, St. Louis, Mo., 1947.

Relatively minor changes have been made in the preparation of this second edition of Dr. Selling's synopsis. A somewhat over-condensed chapter on Disorders of Symbol Use has been added and in the section on neurology the use of the newer drugs has been brought as well up-to-date as in any published text. The new chapters on Psychiatric Therapy and Psychosomatic Medicine deserve commendation as concise approaches to rather wide subjects concerning which there is a large and sometimes confusing literature.

It is this reviewer's opinion that no writer could do justice to two increasingly distinct medical specialties within a single volume, even though it be synoptic in form. Although the merging of neurology and psychiatry is traditional, these are now both "grown-up" specialties and deserving of separate treatment.

The section on neurology, it seems to me, has usefulness in reviewing the subject and as a rough guide to therapy but is neither designed for nor capable of supplanting the current textbooks and periodical literature.

The psychiatric section is lamentably confusing in respect to diagnostic methods: e.g., descriptions of certain psychoneuroses, "neurotoid" psychopathies, and malingering could almost be interchanged as far as differential diagnostic value is concerned. The terminology is a confusing mixture of archaic and modern terms drawn from many sources indiscriminately: e.g., paranoia and paranoid state are used synonomously. Sections on treatment, especially on the medical treatment of alcoholism and on the shock therapies, are nicely descriptive. However, narcoanalysis is mentioned only once, narcosynthesis never, although these procedures have become widely used and acclaimed, particularly since their wide war-time use. Prefrontal leukotomy is not even mentioned!

If this little book's obvious limitations are held in mind the practitioner will find it useful as a ready reference guide or an aid to review.

BRYANT WEDGE, M.D.

Illustrative Electrocardiography. By Julius Burstein, A.B., M.D., and Nathan Bloom, M.D., F.A.C.P. Third Edition, 309 pp. D. Appleton-Century Company, Inc., New York and London, 1948.

Burstein and Bloom have compiled a considerable amount of material into a relatively few pages. Contrary to the style of most books, this one has an ample number of illustrations with accompanying text to clarify them. Of the many books available on the study of electrocardiography, I believe this single book will give the most information to the physician who wants to know about electrocardiography and phonocardiography. In order to round out the special heart studies, there is also a section on radiology of the heart. This book is a good one for the beginner as well as for the advanced clinician in cardiology. The various divisions of cardiac abnormalities are well covered in a concise and succinct manner. This book is not intended for the person interested in complicated physiological electrocardiography. For the physician who is interested in clinical heart disease, I would strongly recommend that this book be added to his library.

MORTON E. BERK, M.D.

REMINISCENCES OF DECEMBER SEVENTH: IV

The eventful day of Sunday, December 7, 1941, dawned on a quiet, peaceful and beautiful morning. I was up early (5:45 a.m.) in order to operate upon a case of acute appendicitis. In the operating room at The Queen's Hospital much noise was heard from sirens and the booming of guns, but it was thought by all present that we were being treated to an early Sunday morning "alert." On leaving Queen's to attend a lecture by Dr. Moorhead at the Mabel Smyth Bldg., numerous people were found clustered about the entrance to the hospital, watching the sky. Dr. Arnold, being among those present, said that the view from the roof was startling and it looked to him as though all hell had broken loose; that much smoke was pouring out of Pearl Harbor and that depth charges were throwing water high in the air—all of which suggested to him that something more than a practice was going on. On reaching Mabel Smyth Bldg., Dr. Hodgins was encountered and he stated in his usual no uncertain terms that it was the real McCoy, since he had seen two battleships over on their sides when he left his home at the Peninsula a short time previously.

Dr. Moorhead was lecturing to a handful of medicos and he later told me that he had started his lecture by a quotation from scripture, "Be ye also ready, for in the hour that ye know not, the Son of man cometh." (St. Matthew, chapter 24:42.)

I had scarcely become seated when the door was thrown open and Dr. Jesse Smith announced that surgeons were wanted at Tripler General Hospital immediately. With Dr. Moorhead in my car we dashed out School Street and turned down Middle Street, but soon found our progress halted by a long line of confused traffic. Remembering the back entrance to Fort Shafter, I turned around and headed in this way but was abruptly halted by a sentry who said we could not pass. Dr. Moorhead said, "Oh, yes we can." He hauled out his purse and exhibited some sort of identification card reputedly declaring him to be a Colonel in the medical reserve corps—perhaps it was membership in the Rotary—at least it produced results and we encountered no further interference. On reaching the hospital we were directed to surgery which was on the second floor of the main building. While changing our clothes Dr. Moorhead remarked that he had been placed on the inactive list of the Army, but it looked as though this status was going to change abruptly.

The operating rooms at this particular spot were three in number—one large room with three tables, and two smaller ones with two tables each. Dr. Moorhead took up his station in the large operating room where he carried on all day long, except at not infrequent intervals when he was called to one of the six other tables to act as consultant. His mature judgment, quick decisions and cool headedness, example and encouraging remarks contributed immeasurably to the attempts of all to do the best surgery possible to so many terrifically wounded under such trying conditions.

It immediately became evident that we were attempting to do blitz surgery in a location and in a manner that was entirely inadequate. First, the operating rooms were on the second floor and they had one common entrance, and the passageway and connecting halls quickly became cluttered with the seriously injured, and there was no place to put them except on the floor. There was no place to segregate the patients who needed surgery immediately from those who first needed treatment for shock or from those who were beyond hope of mortal help. There was an inadequate supply of materials available for treating shock, there were not enough instruments and suture material, and sterile supplies were soon exhausted. Patients were brought directly to surgery without having their clothing removed and without having had any preliminary cleaning up of their wounds. Thus it became necessary for surgical teams to waste much of their valuable time doing the work that should have been done by orderlies and nurses. Much of the transporting of patients from where they had been deposited on the floor on stretchers to the operating table had to be done by the surgeons, and this was a large factor in contributing to their near exhaustion by the time evening arrived.

I put in a call to Queen's Hospital for instruments, and also succeeded in getting Dr. Fennel, who was at home, on the wire, and told him of our desperate need for plasma. He put in a speedy appearance, arrived with a large clothes basket filled with plasma and apparatus for giving it. He spent the remainder of the day treating shock and acting the part of a glorified orderly.

The officers of the regular Army, who on our arrival were already attending the wounded, were gradually replaced at the operating tables as the civilian doctors arrived. They took up the equally important tasks of selecting cases for surgery, for the evacuation of the wounded to and their care on the wards, arranging for X-rays, for replacing supplies and the multitudinous other duties for which their military training and familiarity with the hospital best suited them.

Many of the injured had multiple injuries, and as more help arrived it not infrequently happened that two or three doctors would be engaged on a single individual in widely separated parts of his anatomy. As the day wore on greatly needed supplies became available. Much of it I learned later came from the Red Cross, some from local doctors' offices—such as instruments —and the remainder from supplies of the Army which apparently were abundant but had been overlooked during the confusion accompanying the unexpected arrival of such great numbers of wounded.

I arrived at the Hospital between 9:00 and 9:30 in the morning and some of us, including Drs. Halford, Stevens, Burgess, Bowles and myself left about 9:30 p. m. We left because other doctors were available to take our places, most of the seriously injured who needed immediate attention had been cared for, and last but not least, because our usefulness at the moment was almost nil because of exhaustion. Those of us whom I have just mentioned were taken home in a military car in absolute blackness. The driver had orders to keep all windows closed, and being a good soldier he complied to the point of our near suffocation. I arrived home about midnight, too tired to move or to sleep.

The following morning and for several subsequent days I dressed hundreds of wounds. A corps of civilian nurses was recruited and they went ahead down the wards getting dressings open for inspection; another group followed and redressed the wounds. Many of the dressings had become adherent, especially on amputation stumps, and where a large part of the soft tissues had been torn away. Unfortunately, at the time they were dressed in surgery no sterile vaseline gauze or other similar preparation was available, and dry gauze was applied to the sulfa coated wounds. Many anesthesias, pentothal sodium frequently being given intravenously, were necessary at the first dressing.

For several mornings after the Blitz the civilian doctors did a number of more elective types of surgery, mostly for removal of foreign bodies. I operated upon one individual for an arteriovenous communication in which a missile had injured the common carotid artery and jugular vein and had lodged in the neck. He was semiconscious at the time but it was thought advisable to see if anything could be accomplished, since the outlook seemed hopeless from infection and secondary hemorrhage. All involved vessels were ligated and the foreign body removed, but unfortunately the patient died some time later. Numerous rather bizarre injuries were encountered. In one individual a missile had struck the mid portion of the chin, completely fracturing the lower jaw, driving all the canine and incisor teeth deep into the muscles beneath the floor of the mouth. The wound was debrided, coated with sulfa powder, the mandibular fragments wired into place, and the skin fairly well approximated. Several days later the result looked promising.

Being interested in chest surgery, I was called in to see a number of chest injuries. One such injury stands out as being the most dramatic that I had witnessed in my twenty-seven years of surgical experience. The individual, if I remember correctly, had received a number of penetrating wounds of the chest some hours previously. He was emphysematous from the top of his head to the soles of his feet, and his skin everywhere seemed so tense that it was likely to burst. He was deeply cyanotic and evidently near the point of suffocation. He was clutching at his throat, thrashing about the bed, and in a voice that was growing rapidly weaker was imploring those standing about for help. A needle into the pleura did not reveal a tension pneumothorax and gave no relief. We were all nonplussed for the moment but it suddenly dawned on me that his mediastinal structures were undoubtedly being compressed. A slash with a scalpel across the neck just above the manubrium gave spectacular results. Frothy fluid in great quantities squirted out and ran down over the chest in a continuous stream. The patient immediately experienced relief. His respiration became regular, his cyanosis cleared up and he expressed thanks for the help he had received. Due to the urgent need of other seriously wounded this case was not seen again by me, but I was told he died some time later as most cases of mediastinal emphysema do, due to the location and seriousness of their injuries. However, I am sure the immediate sequence of events following the incision in the neck will remain in the memory of those present as a most dramatic episode.

In the midst of our efforts to take care of the wounded we were reminded that the normal surgical emergencies must be taken care of as well.

Dr. Straub and I removed two acutely inflamed appendices occurring in soldiers during the first few days after the Blitz. One must not lose sight of the necessity for provision being made to handle the less dramatic though equally important afflictions that befall the human race even in time of bombings.

Dr. Moorhead on his arrival from the mainland spoke of a foreign body detector that he had used successfully, and that he had brought along with him. He stated that with this instrument he had been able to locate and remove in a policeman, injured in an explosion at the New York World's Fair, many pieces of metal that otherwise would have presented a very difficult problem. That the record for posterity may remain straight, I would like to record that this instrument was unpacked several days after December 7 and subsequently used, but with how much success I do not know.

I have been asked to include in these comments a statement as to what method was used in assigning the civilian doctors to various stations in the event of an attack. The County Medical Society early in 1941 elected a Preparedness Committee of seven members, consisting of Drs. Arnold, Judd, Withington, Pinkerton, Larsen, Faus and Strode. Dr. Arnold, as Chairman, appointed Dr. Judd to investigate the needs of the Army for aid from the civilian doctors in case of attack, and I was appointed to assign doctors to the various hospitals in the city. We pooled our assignment and worked on the problem as a whole. Before the Blitz surgical teams were appointed that would be available for Tripler and for Schofield hospitals, and for use in the field, and other teams were assigned to the various hospitals in the city. Due to the sudden acute need of surgeons at Tripler the morning of the 7th, these assignments were not adhered to, and the men responded to the call that seemed most urgent.

While the Blitz of December 7 caught almost everyone off guard and resulted in a terrific loss of men and munitions of war, I feel sure it served a very useful purpose both nationally and locally. No act could have reacted so quickly to silence the isolationists and the pacifists and to unite the Nation as one for the common purpose of avenging Pearl Harbor. The civilian medical profession of Hawaii learned very quickly many things of vital importance in adequately caring for a large number of suddenly seriously wounded individuals, and I am sure if we are called upon again in such an emergency we will not be found wanting.

(Signed) J. E. STRODE, M. D.

June 3, 1943.

NOTES AND NEWS

DR. AND MRS. WILLIAM ITO, of Honolulu, are the parents of a son, Ronald Kosuke, their first child, who was born at The Queen's Hospital on January 13.

DR. AND MRS. WALLACE KAWAOKA, of Honolulu, are also proud parents of their first child, a son, Eric John, who was born at The Queen's Hospital on January 20.

DR. PETER J. WASHKO has recently become radiologist at The Clinic, Honolulu, after completion of a fellowship in radiology at the Mayo Foundation and Mayo Clinic, Rochester, Minnesota. He was certified by the American Board of Radiology in 1947. Dr. Washko began his X-ray training while serving as a Captain in the Army from 1941 to 1946, specializing in radiology in 1943, during which time he served at the Foster General Hospital, Jackson, Miss., as radiologist. He is a graduate of the University of Pennsylvania, 1939, and interned at the Reading, Pa., Hospital. Dr. Washko obtained his Hawaii license while serving at Fort Shafter during 1941 and 1942.

DR. RAYMOND C. DUSENDSCHON has become associated with The Medical Group, Honolulu, after having practiced in Lahaina, Maui, at the Pioneer Mill Co., since 1946. Dr. Dusendschon is a native of Anderson, California, and graduated from the University of Southern California Medical School in 1943. His interneship was served at The Queen's Hospital following which he was Captain in the U. S. Army from 1944 to 1946, during which time he was attached to the 7th Infantry Division in the Philippines, Okinawa and Korea.

DR. H. L. ARNOLD, JR., left March 9, and DR. N. R. SLOAN shortly afterward, to attend the Sixth International Leprosy Congress in Havana, Cuba, April 4-11. Dr. Arnold is also attending the meeting of the American Dermatological Association, at which he will read a paper, and both he and Dr. Sloan will attend the International Congresses on Tropical Diseases and Malaria in Washington, D. C., in May.

DR. ROBERT F. GOLTZ, formerly head of dermatology service at Tripler General Hospital, left the Army in February. He will be associated with The Clinic, as dermatologist, replacing DR. ARNOLD, JR., during the latter's absence. In July he will return to the University of Minnesota to complete his training in dermatology.

DR. AND MRS. F. J. HALFORD returned in February from seven months on the mainland. Dr. Halford has been a special student at The Medical Center, Columbia University, New York, where he took a course in industrial medicine dealing with all forms of pre-placement examinations and annual examinations as well as the administration of health plans and practical experience in the field. In January he attended the A.M.A. convention as a delegate from the Hawaii Territorial Medical Association. He reported that great interest was shown there in the coming Pan Pacific Surgical Conference to be held in Honolulu August 30 to September 13. Dr. Halford also stated that innumerable doctors who had served in Hawaii expressed their appreciation for all that was done for them at the Mabel Smyth Building and elsewhere in the islands during the war years.

Mr. and Mrs. Charles E. Biddle (DR. CHARLOTTE MELLER BIDDLE) are the parents of their first child, Charles Edward Jr., born at The Queen's Hospital on January 9.

DR. ROBERT B. FAUS, of Honolulu, has been named as a member of the Territorial Board of Health by Governor Stainback. Dr. Faus replaces DR. HASTINGS WALKER, who was forced to resign by pressure of his duties at the recently expanded Leahi Hospital.

DR. PETE T. OKUMOTO, of Hilo, has taken a residency at the Kapiolani Hospital, Honolulu. He is a graduate of the University of Michigan Medical School in 1943 and interned at Lansing, Michigan. Following this he served as a Captain in the U. S. Army with the 10th Mountain Medical Battalion in Italy. After his discharge from the Army in 1946 he became a resident in surgery at St. Joseph's Hospital, Ft. Wayne, Indiana.

DR. AND MRS. PAUL WIIG, of Reno, Nevada, visited for six weeks recently at their home in Kahala, Honolulu. Dr. Wiig formerly practiced in Honolulu and on Molokai before entering the Army in December, 1941.

DR. JOHN P. FRAZER, formerly of Rochester, N. Y., has become associated with The Medical Group as an otolaryngologist. Dr. Frazer was acting head of the Department of Ear, Nose and Throat at the New Haven Hospital, and was instructor in Surgery, Yale University, from 1942 to 1946. Prior to this he was graduated from the University of Rochester, N. Y., in 1939 after which he spent one year in general pathology at the New York Hospital, Cornell University and a year in general surgery at the Long Island College Hospital under Dr. Emil Goetsch. He served as interne and resident in Ear, Nose and Throat at the New Haven Hospital before being appointed as acting head of the department. He is a Diplomate of the American Board of Otolaryngology, a Fellow of the American Academy of Ophthalmology and Otolaryngology and a member of the American Hearing Society. He recently took graduate training in fenestration surgery in Los Angeles and served as consultant at the Newington, Conn., Veterans' Hospital.

Erratum

Dr. Leon E. Mermod was erroneously identified as Director of the Blood Bank of Hawaii in the January-February issue of the JOURNAL. Dr. Mermod is the Director of Laboratories of the Blood Bank. The Director, since the Bank's inception, has been and still is Dr. F. J. Pinkerton.

ISLAND OF KAUAI

DR. AND MRS. WILLIAM B. TONEY of Kilauea moved to Maui in March where Dr. Toney is now assistant to DR. WILLIAM DUNNE of the Pioneer Mill Plantation Company, Limited.

DR. AND MRS. PALUEL J. FLAGG of New York were recent visitors as guests of the Kauai County Medical Society for a demonstration in Anesthesiology on February 2, 1948.

DR. RICHARD LEE of the Territorial Board of Health was a visitor on the island of Kauai to confer with the government physicians concerning the reasons for their resigning their positions.

ISLAND OF HAWAII

DR. FRANCIS P. C. WONG is now associated with DR. T. KUTSUNAI of Hilo.

DR. E. J. TEAGARDEN is joining the staff of Puumaile Hospital. Dr. Teagarden was formerly practicing in Florida.

DR. AND MRS. WILLIAM BERGIN of Pepeekeo left on February 16 for a three months' trip to the mainland. During Dr. Bergin's absence he will be relieved at Pepeekeo Hospital by DR. H. J. LAMBERT.

Consultants to the Surgeon General

The list of consultants of the 147th General Hospital, as of February 20, 1948, is as follows:

Cloward, Dr. Ralph B., Neurosurgery
Stewart, Dr. Steele, Orthopedic Surgery
Arnold, Dr. Harry L., Jr., Dermatology
Arnold, Dr. Harry L., Sr., Internal Medicine
Bowles, Dr. Herbert E., Obstetrics and Gynecology
Buzaid, Dr. Louis L., Radiology
Larsen, Dr. Nils P., Internal Medicine & Cardiology
Marshall, Dr. Donald C., Pediatrics
Pinkerton, Dr. Forrest J., Ophthalmology & Otorhinolaryngology
Strode, Dr. Joseph E., General Surgery
Molyneux, Dr. Arthur V., Internal Medicine
Gebauer, Dr. Paul W., Thoracic Surgery
Fennel, Dr. Eric A., Pathology
Burgess, Dr. C. M., General Surgery
Guensberg, Dr. Marcus, Psychiatry
Giles, Dr. Frederick, Tuberculosis
Hatt, Dr. R. Nelson, Orthopedic Surgery

Honolulu Surgical Society

The regular bi-monthly meeting was held on January 16 at which time papers were presented as follows: A color movie produced locally by Dr. G. M. Halpern of a gastric resection performed by Dr. Rogers L. Hill; case presentation of a successful pancreatectomy for carcinoma by Dr. Hill; a paper on the evaluation of the vaginal smear method by Dr. F. C. Spencer; a paper on Congenital Cysts of the Lung by Dr. Joseph E. Strode; case reports from the Tripler General Hospital presented by Col. Norman Wiley and his staff.

Honolulu Obstetrical and Gynecological Society

At the last regular meeting held at Aiea Naval Hospital the subject for consideration was Carcinoma of the Uterine Cervix. This was presented by Drs. J. A. Turner and E. T. Knowles.

Meetings of the society will be held regularly on the third Monday evening of each month.

Honolulu Academy of General Practice

Much interest has been shown in the new Honolulu Academy of General Practice which held its first meeting January 15 in the Mabel Smyth Auditorium with an attendance of 78 interested physicians.

A constitution and by-laws have been adopted. Meetings are held on the Wednesday evening preceding the regular Honolulu County Medical Society meeting each month. This bids fair to be a very active group.

Pan-Pacific Surgical Congress

The plans for this meeting to be held in Honolulu from August 30 to September 13, 1948, are proceeding under the chairmanship of DR. F. J. PINKERTON. The same general plan is being followed for this meeting as in the previous one. About forty nationally known surgical specialists have signified their intention of presenting papers and holding clinics at the meeting. The scientific program will be centered around breakfast meetings at which thirty-two clinics will be held, followed by papers during the morning. The afternoons will be free for other activities and there will be four evening general sessions.

The meeting opens on August 30, the day of the arrival of the S. S. Lurline, which will bring most of the visitors. The last scientific meeting will be on September 11 and the business meeting will be held on Monday, September 13.

It is hoped that all Island physicians will make plans to attend the meetings as well as to call it to the attention of their friends on the mainland and Canada, so that they may make plans for attending this very important and worthwhile Congress.

Specialists for the Army

The U. S. Army Medical Corps now has a number of excellent positions open which can be filled by physicians who have completed their formal board requirements (residence phases) but who need one or two years of practice limited to their specialty.

For further information please consult Colonel William Amspacher, Chief, Procurement Branch, U.S. Army, Office of the Surgeon General, Washington 25, D. C., or Mrs. Bennett's office, Mabel Smyth Building, for a detailed circular.

Navy Medical and Dental Commissions

The statutory authority contained in Public Law 365 —80th Congress, Title II (Army-Navy-Public Health Service Medical Officer Procurement Act of 1947) makes it possible now for civilian doctors to become commissioned officers in the regular Navy, provided they meet the professional and physical qualifications. This law is unique in that it does away with, for the first time, the age limitation of thirty-two years of age and permits doctors in civilian practice to enter the Navy and be commissioned with the rank up to and including Captain. The law considers all strata of the medical profession, internes, residents, reserves, former medical officers who have resigned, and present practicing physicians.

In order to make application a doctor must be a citizen of the United States, a graduate from a Class "A" medical school and have served at least one year's internship in an approved hospital. Candidates will then be judged on a number of qualifications such as being a member of a specialty board, his teaching connections, the number of years of professional or scientific practice, hospital or laboratory connections, a statement of military service, etc.

The allocation of rank to successful candidates will depend upon their academic age, professional standing, and experience in the medical field. Successful candidates will then be integrated in line with medical officers of the regular Navy and assigned running mates accordingly. This means that they will be eligible for promotion along with their fellow officers of equal rank.

This law offers a fine opportunity for civilian doctors to make a career in the regular Navy and to enjoy its professional advantages as well as its retirement benefits.

Doctors interested in such a career should write to the Bureau of Naval Personnel, via the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

Electroencephalography Meeting

The Western Society of Electroencephalography has been organized at a meeting at the University of California Hospital in San Francisco. The next meeting will be held on April 10 and 11, 1948, in San Francisco, directly preceding the California Medical Association meeting. Those interested in attending or joining the Society may correspond with Dr. Nicholas A. Bercel, Secretary, Cedars of Lebanon Hospital, Los Angeles.

Interamerican Society of Cardiology

The Interamerican Society of Cardiology has authorized the meeting of the III Interamerican Cardiological Congress, to be held in Chicago, Illinois, at the Michael Reese Hospital, from June 13 to June 17, 1948. This meeting will take place immediately before the American Heart Association annual meeting, June 18 and 19, and the American Medical Association meeting the week of June 20. Inquiries regarding the Congress may be addressed to the offices of the III Interamerican Cardiological Congress, at the Michael Reese Hospital, Chicago, Illinois.

Invitation to All Surgeons to Attend International Surgical Assembly

The Sixth International Assembly of the International College of Surgeons will be held in Rome, Italy, at the invitation of the Italian Government, during the week of May 16-23, 1948, under the presidency of Professors Raffaele Bastianelli and Raffaele Paolucci of Rome, and Mario Dogliotti of Turin. The Secretary of the Assembly is Prof. Giuseppe Bendandi of Rome. Attendance is not limited to the membership of the College: all surgeons in good standing in their medical organizations are invited. Scientific meetings, scientific and commercial exhibits, visits to the Universities of Turin and Milan have been arranged, together with tours to other medical centers in Europe. A special exhibit of ancient texts on surgery is being arranged by Prof. Davide Giordano of Venice, Honorary President, under the active presidency of Prof. Adalberto Pazzini, Professor of History at the University of Rome. This extraordinary exhibit dealing with ancient surgery will be on display in the Vallicelliana Library in one of the historical buildings of the Vatican. Detailed information may be obtained from Dr. Max Thorek, General Secretary, 850 Irving Park Road, Chicago 13. For travel information, address the All Nations Travel Bureau, 38 S. Dearborn Street, Chicago, the official travel representatives for this Assembly.

American Society for the Study of Sterility

The American Society for the Study of Sterility is holding its Fourth Annual National Session on June 21 and 22, 1948, at the Congress Hotel in Chicago. The two-day program will be divided into a special series of panel discussions on male infertility, with papers to be read on female and miscellaneous infertility aspects on the second day.

The chairman this year is Professor Edwin C. Robertson, Chairman of the Department of Obstetrics and Gynecology of Queens College, Ontario, Canada.

Additional information may be obtained from the secretary, Dr. John O. Haman, 490 Post Street, San Francisco 2, California.

Tuberculosis Endowments

Establishment of a number of teaching and research fellowships in the field of tuberculosis by the National Tuberculosis Association was announced February 1 by Dr. Esmond R. Long, director of the NTA's Division of Research. The action was recommended by the executive committee of the NTA's medical section, the American Trudeau Society.

Annual stipends for the fellowships will range from $2400 to $3200, according to Dr. Long. Provision will also be made for laboratory fees and incidental expenses of like character.

The fellowships will be limited to graduates of American schools for teaching and investigation in the United States. While preference will be given to applicants with a Doctor of Philisophy or Doctor of Medicine degree, fellowships will not be restricted to holders of these degrees.

Applications will be considered in the fields of pathology and bacteriology, clinical medicine, epidemiology and social and statistical research. Applicants may elect the institutions in which they wish to study.

Persons interested in obtaining a fellowship should write to Dr. James E. Perkins, managing director, National Tuberculosis Association, 1790 Broadway, New York 19, N. Y., for further information.

CALLING ATTENTION TO
Items of Possible Interest to Friends of Chauncey D. Leake

December, 1947

1. LIGHT HOLIDAY READING: John Gunther's *Inside U.S.A.* (Harper, N.Y., '47, 979 pp., $5) is clever political reporting and leans liberally. David Dodge's *How Green Was My Father* (Simon & Schuster, N.Y., '47, 216 pp., $2.80) is good fun in Mexico. C. Waugh's *The Comics* (MacMillan, N.Y., '47, 310 pp., $5) is psycho-analytical. G. and B. C. Rosen arrange an interesting anthology, *400 Years of a Doctor's Life* (Schuman, N.Y., '47, 429 pp., $5). S. J. Holmes considers *Organic Form and Related Problems* (Univ. California Press, Berkeley, '48, 300 pp., $5). Worthy are W. S. Tsuchida's war letters, *Wear It Proudly* (Univ. California Press, '47, 160 pp., $2.80). Important is symposium on *Physical Science and Human Values* (Princeton Univ. Press, '47, 214 pp., $3). Texans may enjoy S. W. Tait's *Wildcatters* (Princeton Univ. Press, '47, 243 pp., $3). *Letheon: The Cadenced Story of Anesthesia* (Univ. Texas Press, Austin, '47, 128 pp., $1.50) is amusing and may be obtained from Medical Branch Library, Galveston. L. M. Termin and M. H. Oden report on *The Gifted Child Grows Up* (Stanford Univ. Press, Calif., '47, 510 pp., $6). T. H. and J. Huxley offer stimulating *Touchstone for Ethics* (Harper, N.Y., '47, 268 pp., $3). A. C. Kinsey, W. B. Pomeroy and C. E. Martin offer a wow: *Sexual Behavior in the Human Male* (Saunders, Phila., '48, 804 pp., $6.50). Welcome to *The Bulletin of the World Health Organization* ($3) and ditto to *The Chronicle* ($2), obtained from W.H.O. Hq., 350 5th Ave., N.Y. Did you note M. Murphy's interesting profiles of E. A. Rovenstine (*New Yorker,* Oct. 25, Nov. 1 and 8)?

2. PHARMACOLOGICAL: H. H. Henstell & Co. find nitrogen mustards effective in mycosis fungoides, a malignant reticulo-endothelial disease (*Blood* 2:564 '47). H. Selye & Co. claim that adrenal cortical extracts

assist liver regeneration (*Endocrinol.* 41:258 '47). S. Pere finds digitalis, strophanthin and mercury diuretics increase blood coagulability in congestive heart disease, contributing to thromboses (*Ann. Med. Int. Fenniae* 36:124 '47, all English!). G. G. Villela finds folic acid enhances acute neoarsphenamine toxicity (*Arch. Biochem.* 15:157 '47). E. Rothlin offers full survey of ergot alkaloids (*Bull. Schweiz Akad. Med. Wiss* 2:249 '47). C. Heymans, J. Jacob and G. Liljestrand show oxygen want and CO_2 increase in muscle work stimulate respiration reflexly over carotid sinus and directly on center (*Acta Physiol. Scand.* 14:86 '47). C. V. Winder reports quantitative statistical appraisal of analgesic action (*Arch. Internat. Pharma. Therap.* 74:219 '47). N. Emmelin and W. Feldberg find 0.5% histamine and 1% acetylcholine in hairs of common nettle (urtica urens) and that combination causes sting (*J. Physiol.* 106:440 '47). H. W. Elliott & Co. find amidone 10 times as potent an inhibitor of brain glucose oxidation as demerol (*J. Pharmacol. Exp. Therap.* 91:98 '47.) D. P. Earle and B. B. Brodie discuss excretion of caronomide, while K. H. Beyer & Co. report on toxicity and other properties relating to inhibition of penicillin excretion (*Ibid.* pp. 250, 263, 272). R. H. K. Foster reports on piperidine cmpds. with morphine action (*Ibid.* p. 195). D. Grob & Co. find diisopropyl fluorophosphate causes increased intestinal and neural activitiy (*Bull. Johns Hopkins Hosp.* 81:217 '47). R. E. Feeney & Co. find zinc (1 ppm) necessary for subtilin formation (*Arch. Biochem.* 15:13 '47). J. M. Lewis & Co. find water propylene glycol solutions of vitamin A are better clinically than oil solutions (*J. Pediat.* 31:496 '47). J. Ehrlich & Co. describe powerful antibiotic chloromycetin (*Science* 106:417, Oct. 31, '47). E. R. Loew reviews antihistamine cmpds. (*Physiol. Rev.* 27:542 '47). Our E. E. Wilkinson describes Na citrate treatment of lead encephalopathy (*Texas St. J. Med.* 43:442 '47).

3. ONCOLOGICAL: G. Toennies surveys protein-chemical aspects of cancer (*Canc. Res.* 7:193 '47). B. Eckman and J. P. Strombeck discuss tumorigenic metabolism of 2, 3-asptoluene (*Acta Physiol. Scand.* 14:43, 63 '47). G. Joyet shows high selectivity of radioactive K_{42} for spleen and low selectivity for tumors (*Bull. Schweiz Akad. Wiss* 2:363 '47). L. Ahlstrom & Co. discuss turnover of nucleid acid in sarcomata (*Ark. Kemi* 24A, No. 12 '47). Note symposium on chemistry and metabolism of nucleic acids (*Fed. Proc.* 6:487 '47).

4. ETC.: Noteworthy symposium on allergy and asthma (*South Afr. Med. J.* 21:721, Oct. 11, '47). E. J. G. Garcia claims nervous system plays part in sensitization phenomena (*Arch. Farm. Biog. Tucuman* 3:231 '47). T. G. Randolph blames allergy for behavior problems in children (*J. Pediat.* 31:560 '47). S. Aceves and R. Carral discuss diagnosis of tricuspid lesions (*Arch. Inst. Cardiol. Mexico* 17:701 '47). M. Campbell gives Lumleian Lecture on paroxysmal tachycardias (*Lancet* 2:641, Nov. 1, '47). G. Burch & Co. find reduced sodium clearance in congestive heart failure (*J. Lab. Clin. Med.* 32:1169 '47). G. V. Anrep & Co. say histaminolytic index is high in pregnancy and falls after delivery (*J. Physiol.* 106:379 '47). Our E. Ogden describes extra renal sequelae to renal hypertension (*Bull. N. Y. Acad. Med.* 23:643 '47). Our A. Ruskin and F. McKinley conclude that potassium thiocyanate in hypertension is hazardous and unreliable (*Am. Heart J.* 34:691 '47).

January, 1948

1. NEW BOOKS: Henry Schuman announces several honeys: Ruth Benedict and Gene Weltfish's *In Henry's Backyard: The Races of Mankind* (N.Y., '48, $2.50); D. Schullian and M. Schoen's *Music and Medicine* (N.Y., '48, 500 pp., $6.50); Dorothea Singer's *Giordano Bruno: His Life and Thought* (April, '48); G. Sarton's *The Road to Understanding: Essays in the History of Civilization* (April, '48), and D. Drake's *Pioneer Life in Kentucky*, ed. E. F. Horine (April, '48). F. S. C. Northrop discusses *The Logic of the Sciences and the Humanities* (MacMillan, N.Y., '48, $4.50). E. H. Northey summarizes *The Sulfonamides and Allied Compounds* (Reinhold, N.Y., '47, 688 pp., $15). M. Sahyun describes *Proteins and Amino Acids in Nutrition* (Reinhold, N.Y., '47, 540 pp., $7.50). I. Chavez surveys *Mexico en la Cultura Medica* (Colegio Nacional. Mexico, D. F., '47, 187 pp.). K. O. Moller offers *Pharmakologie als Theoretische Grundlage einer Rationellen Therapie* (Schwabe, Basle, '48, 744 pp., SWFr 48). K. von Neergaard discusses *Dynamische Reaktionspathologie* (Schwabe, Basle, '47, 320 pp., SWFr 24). H. A. Kreis compiles *Kompendium der Parasitischen Wurmer in Menschen* (Schwabe, Basle, '47, 136 pp., SWFr 10). H. Standinger writes on *Makromoleculare Chemie und Biolgie* (Wepf, Basle, '48, 160 pp., SWFr 18). Grace Crile edits George Crile's *Autobiography* (Lippincott, Phila., '47, 2 vols., 640 pp., $10). L. V. Ackerman and J. A. Regato offer *Cancer: Diagnosis, Treatment, Prognosis* (Mosby, St. Louis, '47, 1200 pp., $20). R. T. Johnstone appraises *Occupational Medicine and Industrial Hygiene* (Mosby, St. Louis, '47, 550 pp., $8.50).

2. BIOCHEMICAL: N. B. important symposium on *Nucleic Acid* (Symp. Soc. Exp. Biol. No. 1, Cambridge Univ. Press, '47, 290 pp., $8.50, 19 contributors: P. C. Koller concludes chemicals may be as effective mutafacient agents as ionizing radiation). E. Baldwin emphasizes *Dynamic Aspects of Biochemistry* (MacMillan, N.Y., '47, 480 pp.). Annual Review of Biochemistry increasingly stresses clinical applications (Annual Reviews, Stanford Univ., '47, 740 pp., $6). P. Karrer and R. Schwyzer consider possibility of antibodies against vitamins (*Helv. Chem. Acta* 30:1767 '47). O. Osler & Co. synthesize vitamin A derivatives (*Ibid.* p. 1911). *The Chemistry of Penicillin* prepared under auspices of National Academy of Sciences and O.S.R.D. will be published by Princeton Univ. Press: see "Biosynthesis of penicillins" (*Science* 106:503, Nov. 28, '47). I. L. Chaikoff & Co. show thyroids fix inorganic iodine independently of subsequent conversion to diiodotyrosine and thyroxine (*J. Biol. Chem.* 171:189 '47). E. L. Smith and R. D. Greene find high threonine content (7-11%) in immune proteins (*Ibid.* p. 355). M. W. Chase continues studies on sensitization by simple chemical compounds (*J. Exp. Med.* 86:489 '47). J. C. Barsantini and G. M. C. Masson say most sex hormone steriods inhibit lactation, via ovaries, while progesterone and adrenocortical steroids are inactive (*Endocrinol.* 41:299 '47). G. B. Wislocki continues studies on anatomical chemistry (molecular architecture of cells): for blood (*Anat. Rec.* 96:249 '47); for mamary gland (*Am. J. Anat.* 81:309 '47). V. S. Matthews & Co. report degenerative kidney damage after repeated administration of diethylstilbestrol and sesame oil (*Proc. Soc. Exp. Biol. Med.* 66:195 '47). E. R. Trethewie notes deaminating enzyme liberated from ischemic muscles (*Austral. J. Exp. Biol. Med. Sci.* 25:291 '47).

3. PHYSIOLOGICAL: J. F. Fulton, T. G. Brown and A. D. Ritchie eulogize C. S. Sherrington on his 90th birthday (*Brit. Med. J.* 2:807-813, Nov. 22, '47). G. Ekehorn continues penetrating study of G. S. Sherrington's philosophy in manner as stimulating as his subject (*Acta Med. Scand. Suppl.* 199, Stockholm, '47). J. Beattie well reviews metabolic disturbances after injury (*Brit. Med. J.* 2:813, Nov. 22, '47). B. D. Wyke reviews clinical physiology of cerebellum (*Med. J. Austral.* 34: 2:533, Nov. 1, '47). F. Brucke surveys physiology and pharmacology of the thyroid (*Wien. Klin. Wchschr.* 2:709, Oct. 31, '47). M. Monnier and F. Boehm describe perimetric electroretinography (*Helv. Physiol. Pharmacol. Acta* 5:205 '47). J. F. P. Erasmus notes post-traumatic arterial spasm (*South Africa Med. J.* 21:806, Nov. 8, '47). M. Wilburne & Co. recommend atropine for prevention of paroxysmal ventricular tachycardia (*Am. Heart J.* 34:860 '47). Our O. W. Beard and G. M. Decherd note variations in 1st heart sound (*Ibid* p. 809).

4. NEW YEAR NOTES: N. B. H. H. Dale's great Pilgrim Trust Lecture, The Freedom of Science (*Proc. Am. Philosoph. Soc.* 91:64 '47). N. B. L. Szilard's public letter to Stalin (*Bull. Atom Sci.* 3:347 '47). N. B. bibliography on bacterial warfare (*Bull. Atom. Sci.* 3:364 '47). P. B. Medawar writes on cellular inheritance and transformation (*Biol. Rev. Cambridge Philo. Soc.* 22:360 '47). New illustrated edition planned for *Letheon: the Cadenced Story of Anesthesia,* since 1st ed. is exhausted (Univ. Texas Press, Austin, '48, available from Univ. Texas Med. Branch Library, Galveston, at $2.50).

February, 1948

1. NEUROPSYCHIATRY: P. Gruenwald discloses high incidence of mental deficiency of prenatal origin (*Am. J. Med. Sci.* 214:605, '47). H. Cohen discusses increase and decrease of referred pain of visceral origin (*Lancet* 2:934, Dec. 27, '47). L. R. Wolberg describes hypnoanalysis in relation to psychoanalytic therapy (*Am. J. Psychotherap.* 1:412, '47). E. B. Jackson discusses learning and discipline (*Am. J. Orthopsych.* 17: 580, '47). W. R. Hess reviews autonomic function and the mid-brain (*Helv. Physiol. Pharmacol. Acta,* Suppl. 4, Schwabe, Basle, '48, 90 pp., 12 SwFr). H. J. Eysenck surveys *Dimensions of Personality* (Kegan, Paul, London, '47, 317 pp., 25s). T. Benedek interprets *Insight and Personality Adjustment* (Ronald, N.Y. 10, '47, 307 pp., $4). M. Sherman analyses *Intelligence and Its Deviations* (Ronald, N.Y., '48, 300 pp., $3.75). L. J. Saul offers *Emotional Maturity: The Dynamics of Personality* (Lippincott, Phila., '48, 338 pp., $5). A. D. Hart might bookify Psychosomatic Diagnosis (*J.A.M.A.* 136:147, Jan. 17, '48). G. Murphy also surveys *Personality: A Biosocial Approach to Origins and Structure* (Harper, N.Y., '47, 999 pp., $5). H. M. Pollock discusses *Mental Disease and Social Welfare* (State Hosp. Press, Utica, N.Y., '47, 237 pp., $2). D. B. Barron speculates how far afield symbolism may go (*Psychoanal. Rev.* 34:395, '47). B. Karpman notes moral agenesis (*Psycho. Quart.* 21:361, '47). R. Conteaux well reviews dope on myoneural synapse (*Rev. Canad. Bio.* 6:563, '47). J. P. Scott offers comparative data on dominance and frustration-aggression hypothesis (*Physiol. Zool.* 21:31, '48). R. Derom revives a bismuth prophylaxis of syphilis (*Rev. Belge Path. Med. Exp.* 18:101, '47).

2. PHARMACOLOGY. H. M. Evans surveys recent work on hormones of anterior pituitary (*J. de Physiol.* 39:121, '47). G. Valette and R. Cavier discuss cutaneous absorption (*Ibid* p. 137). F. M. Berger finds myanesin acts by selective depression of spinal cord (*Brit. J. Pharmacol.* 2:241, '47). G. W. Hayward finds tetraethyl ammonium bromide temporarily helpful in hypertensive heart failure (*Lancet* 2:18, Jan. 3, '48). W. Seifriz revives J. Blake's century-old notion (*Am. J. Med. Sci.* 15:63, 1848) on relation between isomorphism and isoteriam and biological action (*Science* 107:15, Jan. 2, '48). M. L. Ahuja & Co. find heparin neutralizes venoms of viperine snakes (*Ind. J. Med. Res.* 35:227, '47). W. Anderson discusses physico-chemical aspects of chemical carcinogens in relation to energy transfer (*Nature* 160:893, Dec. 27, '47). R. R. MacIntosh and W. W. Mushin offer well illustrated *Physics for the Anesthetist* (C. C. Thomas, Springfield, Ill., '47, 241 pp., $7.50). E. B. Verney's Croonian Lecture covers antidiuretic hormone and factors determining its release (*Proc. Roy. Soc. B.* 135:25, Dec. '47). R. A. Hemphill finds tannin internally helpful in intestinal allergy (*Acta Med. Scand.* 129:56, '47). H. Colldahl recommends glucose in hypnotic poisoning, especially with barbitals (*Ibid* p. 257). M. Friedman and R. Bine show excess potassium inhibits cardiac effects of digitalis glycosides (*Am. J. Med. Sci.* 214:633, '47). M. M. Hartman (*Ann. Allergy* 5:536, '47) confirms G. Lehman and P. K. Knoefel (*J. Pharmacol.* 80:335, '44) on anti-spasmodic and sedative action of trasentin-like 9, 10-dihydroanthracene diethylamino ethyl carboxylate. R. T. Williams discusses *Detoxication Mechanisms* (Chapman and Hall, London, '48, 296 pp., 25s). F. Gollan & Co. describe a non-toxic hypertensinase from wheat bran effective IV (*J. Exp. Med.* 87:29, '48). D. Marsh and C. Ross describe pressor action of cyclopentyl ethyl amines (*J. Pharmacol.* 91:324, '47). J. Finnegan & Co. study nicotine excretion (*Ibid* p. 357).

3. ET ALIA: H. P. Himsworth *Lectures on the Liver and Its Diseases* (Blackwell, Oxford, '47, 220 pp., 18s 6d). A. T. Cameron reviews *Taste Sense and Relative Sweetness* (Sugar Res. Fd., Sci. Rep. Serv. No. 9, N.Y., Dec., '47). Note symposium on schistosomiasis (Nat. Inst. Health, Bull. 189, Washington, '47, 212 pp.). N. B. symposium on pernicious anemia opening serial Festschrift for G. R. Monot (*Blood* 3:5, '48). R. J. V. Pulvertaft discusses post-operative pulmonary embolism (*Ann. Roy. Coll. Surg. Eng.* 1:181, '47). J. Albert and M. B. Abad show 12 yr. cyclic incidence of beri-beri in Philippines and indicate factors other than thiamine in etiology (*Acta Med. Philip.* 4:7, '47). R. F. A. Dean and R. A. McCance show renal clearances for urea and NaCl are much lower in infants than in adults (*Nature* 160:904, Dec. 27, '47). J. D. Adams and G. K. Coonse discuss bursitis (*Occup. Med.* 4:137, '47). A. C. M. Lips & Co. find no correlation between blood histamine levels and peptic ulcer (*Acta Med. Scand.* 129:274, '47). J. G. Allen & Co. note heparinemia after exposure to large doses of ionizing radiation (*J. Exp. Med.* 87:71, '48). D. Davis reminds spinal nerve root pain (radiculitis) may simulate symptoms of coronary disease (*Am. Heart J.* 35:70, '48). A. Fagraeus says antibodies are formed in reticuloendothelial system especially in plasma cells (*J. Immunol.* 58:1, '48). J. W. Heard reviews purified animal viruses (*Ibid* p. 49). H. Goldblatt introduces symposium series on hypertension (*Am. J. Med.* 4:100, '48). D. B. Tresidder discusses aims of medical education (*J. Asso. Am. Med. Coll.* 23:8, '48).

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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SYMPOSIUM: THE PRACTICAL NURSE IN HAWAII

Held at the Annual Meeting of the Hospital Association of Hawaii in December 1947 was the panel discussion on practical nurses in the Territory, with Miss Virginia Jones, Mrs. Mildred Pinner, Mrs. Marjorie Elliott and Mrs. Esther Black, speakers; and Miss Charlotte Kerr, co-ordinator. The symposium was again presented at the City and County of Honolulu Nurses' Association meeting in February 1948. The subject is receiving a great deal of attention throughout the nation at the present time and is one in which nurses particularly are interested. It will undoubtedly be welcome reading for those who did not have the opportunity to attend either meeting at which the material was presented.

THE PLACE OF THE PRACTICAL NURSE IN THE HOSPITAL AND IN THE COMMUNITY

MRS. MILDRED PINNER, R.N., M.S.*

There are two types of nursing schools: the professional school, with which you are all familiar, and that type which is mushrooming the country over today, the practical school. It is true there is as much variation in the standings of the practical schools, which have been in some instances the correspondence type, as there has always been and still is in the professional schools.

In order to clarify our thinking, it seems advisable to define the term "practical nurse." She is "a nurse who can be prepared to care for subacute, convalescent, and chronic patients and to assist the registered professional nurse in the care of others. She works under the direction of a licensed physician and the supervision of the registered professional nurse. She may work in homes, hospitals, institutions, public health agencies, doctors' offices, and in commercial and industrial firms."

Even though many hospitals have used practical nurses exclusively, the additional need for practical nurses started during the war years. At that time, we called on volunteers as well. These people have become interested in nursing and are a stimulus today in the role of developing schools and utilizing the services of practical nurses.

There has been an insufficient supply of nurses to meet civilian needs. This is due to several factors, such as the increasing demand of the public for nurses, the requirements of the government services, and the failure of nurses after discharge from the armed services to return to civilian work. The loss of nurses has been due to two major factors: first, the failure of the profession to attract and hold young women, chiefly for economic reasons; second, the complaints of nurses that they are bored with routine work.

Medicine has been and is becoming increasingly complex, hence the need for more education for the professional nurse. Each additional didactic course in the curriculum of the student leaves less time for bedside care. To make effective use of the advance in medical knowledge, the doctor must be able to look to the professional nurse to relieve him of certain responsibilities and to assist him with new ones such as blood transfusions, intravenous injections, hypodermoclysis, gastric lavage, blood pressure reading, skin tests; intramuscular injections of drugs including penicillin, et cetera; irrigation of catheters and drainage tubes, application of polio packs, and performance of exercises under the direction of the physiotherapist. The professional nurse's knowledge and skill can benefit only as many patients as the limits of time and energy permit.

Because of these many changes, it seems feasible to train practical nurses and utilize their services in either augmenting or supplementing the duties

* Director of Nursing, St. Francis Hospital; President, Hawaii League of Nursing Education.

of the professional nurse. In these early post-war years, there have been both fear and confusion on the part of both groups, fear from the poorly qualified professional nurse that she will be replaced by the practical nurse and confusion or misunderstanding among the public as to the allocation of duties.

There are two primary ways in which this problem can be met: first, by improved utilization of existing nurse power, and second, through the judicious use of supplementary nursing personnel. Both are important and one does not exclude the other; a workable combination will meet our nursing needs today.

To provide adequate nursing care, hospitals must study nursing needs seriously and make an intelligent assignment of all available personnel, including clinical personnel, messengers, and those persons we know of as practical nurses. The latter group must be thoroughly trained for and assigned to the type of work they can best perform as a supplement of the work of the professional nurses. In consideration of the health of our nation, we cannot afford to use unqualified people.

Practical nurses with a program of nine to twelve months should, upon graduation, be ready to take their place in the hospital nursing staff where they should be able to give elementary care in medicine, surgery, pediatrics, and obstetrics. They should be trained also to work in homes under the supervision of public health nurses. They should be able to care for chronic disease patients, convalescents, and the aged in hospitals and homes with somewhat less supervision than in acute hospitals. In order to assure the proper preparation of practical nurses, a uniform course of instruction should be offered for licensure. For additional effectiveness, a national standard of education and licensing should be adopted.

With the practical nurse adequately trained for certain specific work, her duties need not conflict in any way with those of the professional nurse. A clean cut job description will preclude any possibility that the two will work at cross-purposes. There should be an eventual fusion of the functions of both. One type of service should supplement the other. The care of each patient must remain an inviolable whole from the patient's point of view. Good planning can achieve this.

Summary

The urgent need for trained practical nurses has been created by the following contributing factors:

1. The use of practical nurses in the care of a large percentage of subacute, chronic, convalescent, and aged patients in institutions and in private homes has become a necessity if the health needs of a large segment of the population are to be met satisfactorily. The advanced skills and technical knowledge of the professional nurse should be applied primarily in situations requiring a professional background of preparation and experience.
2. The increasing longevity of the population is creating a larger number of patients requiring the services of the practical nurse.
3. Thousands of war veterans will require practical nurse service in institutions and homes for many years.
4. Expanding facilities and improved care of chronic, mental, and tuberculous patients are accelerating the demand for trained practical nurses in institutions.
5. The many recent changes in medical treatment during various types of illnesses have brought about related changes in nursing needs which can be met in part by well-prepared practical nurses.
6. Extensive nation-wide plans for augmenting general hospitals and health facilities will require a corresponding increase in all types of personnel. It is anticipated that this development will involve the employment of large numbers of practical nurses.
7. A wide variety of additional employment opportunities in which the practical nurse works directly under professional supervision has developed during the past ten years. Practical nurses are now employed by visiting nurse associations, industries, disciplinary institutions, day nurseries, children's shelters, school infirmaries, homes for the handicapped, and in physicians' offices.

We should develop other practical nurse programs which can be called Vocational Training programs on the outer islands, as well. The one now in operation which has been sponsored by the D.P.I. is housed at Washington Intermediate School. It needs a separate location from the Professional School of Nursing as there is a distinct difference in the objectives of each. The practical nurse is being trained for a vocation, the professional nurse is being educated as a health teacher and leader in nursing.

LICENSING OF PRACTICAL NURSES AND THEIR PLACE IN THE NURSING PROFESSION

VIRGINIA JONES, R.N., M.A.*

Since 1919 more than 20 states have enacted laws providing for the licensing of practical nurses, attendants and other auxiliary workers in the care of the sick. Within that time the need for such workers has increased, and along with it, the need for control of this group if the public is to be protected from the "Sairy Gamp" kind of nursing care. At a meeting of representatives

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of state nurse licensing boards which I attended in Seattle in September, all 48 states reported efforts to procure laws requiring licensing for practical nurses.

Hawaii's law making licensing mandatory for all those who nurse for hire was enacted in 1945 and revised in 1947. In that law a registered nurse is defined as: "A person who (a) performs any professional services requiring the application of principles of nursing based on biological, physical and social sciences, such as responsible supervision of a patient requiring skill in observation of symptoms and reactions and the accurate recording of the facts and carrying out of treatments and medications as prescribed by a licensed physician, and the application of such nursing procedures as involve understanding of cause and effect in order to safeguard life and health of a patient and others."

A practical nurse is defined as: "A person who (b) performs such duties as are required in the physical care of a patient and in carrying out of medical orders as prescribed by a licensed physician, requiring an understanding of nursing but not requiring the professional service as outlined in (a)."

Since 1945, 767 licenses have been granted to practical nurses by the Board for Licensing of Nurses, which is responsible by law for setting standards for training, examining and licensing of all persons who nurse for hire.

Professional nurses have come to realize that with expanding medical care programs and increased responsibility for modern medical procedures left to the registered nurse, they cannot possibly provide all the nursing care needed by the sick. They believe that certain routine procedures can be done adequately by less skilled workers who are trained to do the work expected of them. This will leave the time of the registered nurse for such skilled procedures as: intramuscular treatments, intravenous injections, irrigations and other treatments formerly done only by the physician.

Professional nurses are thoroughly convinced that the practical nurse group must be selected and trained for their jobs and aided in developing their own ethics and standards. Since doctors and registered nurses have developed their professional status and educational standards through licensing, it is felt that licensing is a first step for practical nurses. Only with licensing can qualifications be required, workers selected and examined and a registry of persons so qualified maintained.

There have been certain objections voiced to the licensing requirement. The hospital administrators say there will not be enough people qualified to carry on the work needed. Over 100 people of suitable material applied for the first school course about which you will be informed later. It is expected that during this first year at least 70 of them will be graduated from the school. As this school expands its facilities and others are set up on the other islands, a sufficient number to meet the replacement needs should be qualified for licenses.

The physicians say this law requires anybody who carries a bed pan to a patient to be licensed and that the licensing fee is a hardship on the persons working in this capacity. The interpretation of the law states that persons *specifically hired* for certain nursing duties occasionally are not included. Much difficulty comes because persons hired for janitorial or clerical duties may be asked to give part time to nursing. A redistribution of duties where more than one such worker is employed would eliminate the necessity for licensing the individual who is doing janitor work.

Professional nurses, especially those doing private duty, see the practical nurses taking away their cases because they work for less. This threat seems unlikely. Less than 10 of the practical nurses now licensed have done, or are expecting to do, private duty nursing. The prospect that there will be more nurses than there is care to be given is remote. The professional nurse also is afraid that because of confusion in the public's understanding of the difference between the training of the two groups, the practical nurse will usurp the functions and prerogatives belonging to the professional nurse. This, it is hoped, will be avoided by developing in the practical nurse an appreciation of her status and limitations, during the period of training. Strange as it may seem, the people from whom there have been no objections are those who must apply for the license and pay the fee.

Because the Nurses' Association, Territory of Hawaii, feels that the practical nurses must have recognized status in the nursing care program and that the only way such a status can be established and maintained is through group action of those concerned, a committee has been appointed to study ways and means of assisting practical nurses to form an organization within the Nurses' Association. This is an issue which the national nursing organizations are studying and on which they will take some action at the biennial meeting in June, 1948. It is hoped that some plan will be in operation here before that date so that both professional and practical nurses may share the

responsibilities for providing adequate and safe nursing care for the public.

Summary

In this presentation, differentiation has been made between three groups of workers needed to provide adequate nursing care, namely: the professional nurse who gives the care which requires skills, knowledge of cause and effect and ability to interpret reaction to treatment; the practical nurse who is prepared to give safe, comfortable physical care to the patient; and the auxiliary workers such as porters and maids who help to maintain an environment which makes good nursing possible. The latter two groups are supervised by the professional group.

In Hawaii, the professional and practical nurses are required to be licensed, the auxiliary workers are not. The responsibility for becoming licensed rests with the individual worker but the responsibility for making sure that the unlicensed person is not assigned nursing duties rests largely with the employer.

Recommendations for the selection, training, assignment of duties and supervision of practical nurses are made by and stated in publications of the U. S. Office of Education, the U. S. Public Health Service and a joint committee of six national nursing organizations.

The question has been raised by physicians and hospital administrators, "Can we train a sufficient number of practical nurses to meet the needs?" The question will be asked, "Is there danger of training too many?"

Along with the hospital survey and planning program should go a survey of nursing needs and resources, so that the planning and training programs for both professional and practical nurses may be approached intelligently according to need. This will necessitate not only a study of numbers of nurses needed, but a job analysis to determine the number of each kind needed to provide adequate nursing care in the Territory. We hope the Community Nursing Council will follow up its fine work of promoting the school by attacking this problem.

That the public is concerned with the provision for adequate nursing care has been evidenced by the response to this new program for training of practical nurses. Hospital administrators and physicians have encouraged their workers to become licensed. Hospitals are giving the time of staff members and the use of facilities for clinical practice. School personnel, starting with Dr. Carey of McKinley High School who called the first group together to discuss the problem, through the Department of Public Instruction and the faculty and staff of Washington Intermediate School, have accepted the program as theirs. Organizations like the Red Cross have given supplies. Radio, newspaper and publicity agents have given time and space to its interpretation. Not least has been the financial support given by the Chamber of Commerce Public Health Committee, and the interest and enthusiasm shown by the many applicants for the course.

With all of this cooperation and the patience and understanding of those needing and employing practical nurses, there is little doubt that the program will reach its goal of helping to provide more adequate nursing care.

HISTORY OF THE COURSE FOR TRAINING PRACTICAL NURSES; ACTIVITIES OF COMMUNITY NURSING COUNCIL

MRS. GARDNER BLACK, R.N.*

Here in Hawaii during the war years there were two separate groups concerning themselves with nursing shortages and the growing need for secondary nurses. The professional nurses became increasingly alarmed. There were fewer of them, and their services were being used to the utmost in the more highly skilled and supervisory field. The actual bedside needs of the patient were suffering accordingly. The Board for the Licensing of Nurses instituted a survey, Territorial in scope, to determine nursing needs. This was done by Miss Josephine Valentine of New York, expert in the field, in the fall of 1946. In her report, at the completion of a very thorough inspection, she recommended among other things, the immediate institution of a school for practical nurses. A committee appointed by the Board for Licensing of Nurses was set up in September of that year to investigate the possibilities of such a program. The problems studied were: (1) Administration and finances; (2) Facilities and requirements for admission; (3) Curriculum and examinations for licensing. After due deliberation and investigation in these various phases, a set of minimum regulations to govern courses and policies of such a school was submitted to the Board for Licensing of Nurses. These regulations were accepted by that Board and now constitute the standard for governing of such schools.

At the same time that the hospitals and nurses were formulating their plans, a group of educators were also surveying the field, with the thought of providing suitable vocational outlet for a growing group of local young women. This group

* Member, Board of Directors of Community Nursing Council; Chairman, Committee on Practical Nursing, Board for Licensing of Nurses.

crystalized into what was then known as "Dr. Carey's Committee". After study of the community and its most vital needs in employment, practical nursing seemed to be the vocation most essential and most suited to the group. As a result of this early pioneering on the part of the educators, the Community Nursing Council was formed, having as its members, both professional and lay persons; in fact, those people vitally interested in this field of community need.

The Committee appointed by the Board for Licensing of Nurses and the Community Nursing Council worked in close harmony with the Vocational Division of the Department of Public Instruction toward establishing the school for practical nurses. The D.P.I. included the expenses of such a school in the budget submitted to the last legislature. Members of the Community Nursing Council appeared before the House Finance Committee to explain the need and to make a plea for the inclusion of the school expenditures, but to no avail, as it was disallowed by that body.

In July 1947 the D.P.I. found that it could finance the salaries of the required faculty and provide suitable housing facilities for the school, but lacked the amount of cash necessary to purchase equipment, supplies and establish a small operating fund. The Nursing Council then applied to the Public Health Committee of the Chamber of Commerce for this additional fund and the sum of $8,000.00 was generously given to the Vocational Department of the D.P.I. and earmarked for the School of Practical Nurses. This amount in addition to the public funds will see the school through the first two years, it is hoped. It is expected by that time that the project will have proved itself to such an extent that the legislature will appropriate sufficient funds to insure future training of practical nurses. It is also hoped that interested persons, institutions, etc., will provide scholarships, i.e., help finance the living of some of the students while they are attending the school.

The Community Nursing Council is devoted to the following purposes:

1. To study nursing in relation to the total community needs.

2. To provide a forum for the producer and consumer to promote mutual understanding and joint action.

3. To serve as a clearing house on all matters pertaining to nursing care in the community.

4. To carry on programs which are of interest to more than one group, but do not fall within the responsibility of any agency.

OBJECTIVES AND CURRENT PROGRAM OF THE TRAINING COURSE FOR PRACTICAL NURSES

MRS. MARJORIE ELLIOTT, R.N., B.S.*

There is a practical nurse training course—here in Honolulu! In this school we work to teach students the nursing procedures and skills that are commonly used in the care of chronic, subacute and convalescent patients; at the same time limiting the scope of the practical nurse's activities to those procedures which she can safely carry out under the supervision of a physician or a professional nurse.

A practical nurse in order to perform her nursing duties safely and intelligently, must know more than the mere technique of basic skills and procedures and the use and care of equipment and supplies. In our school we teach her the background, and related knowledge and information that will enable her to perform her duties understandingly, intelligently, and with safety to the patient. For example, the untrained practical nurse may know how to give a satisfactory bed bath to the chronic diabetic, but lacking knowledge of the nature of the disease and its effect on the circulatory system, she would not be likely to give as meticulous care to hands and feet and breaks in the skin as the nurse who has studied the disease and understands the complications that can so easily develop.

The Practical Nurse Training Course has been set up under the Vocational Department of the Department of Public Instruction and is located in Washington Intermediate School. There we have a foods laboratory, a small furnished apartment for use in the teaching of Home Management and one large class room and nursing laboratory.

The faculty consists of myself (instructor in charge) and Mrs. Myrtle Schattenburg (co-ordinating instructor) who teaches nursing procedures and serves as co-ordinator between our school and the various affiliating organizations. Miss Mary Murai, hospital dietitian, teaches Foods and Home Management on a part time basis. We also have a part time student secretary.

The school is greatly benefited by the able advice and assistance of an Advisory Committee comprised of representatives of hospitals and various community organizations, headed by Mr. Clarence Ferdun of the Vocational Department of the D.P.I.

We are accepting three classes of students a year for courses of 39 weeks each. The first class

* Instructor in charge of practical nurse training, Department of Public Instruction.

began on October 20, the second will begin on January 5, and the third on March 15. Classes are limited to 24 members, the students being selected to give as large a representation from the outer islands as possible, up to one half of the class. The present class includes three students from Hawaii, four from Kauai, two from rural Oahu and the remainder from Honolulu. The students, who range in age from 18 to 50, are selected by consideration of a number of factors including basic qualifications, nursing aptitude tests, references, and personal interviews.

We hope that it will be possible to soon have a class of male practical nurses, for it is realized that this group, commonly called orderlies or attendants, is as essential in the care of the sick as the women nurses are.

The 39-week course consists of 9 weeks of intensive theoretical training followed by 30 weeks of clinical experience obtained by affiliation. During the 9 weeks period students receive a total of 265 hours of instruction divided between nursing procedures, food, preparation and meal planning, ethics and personal and professional relationships, care of the chronic and aged, infant and child care and development and anatomy, physiology and personal hygiene.

Affiliations for the purpose of practical experience have been arranged with Leahi Hospital, Kapiolani Maternity Hospital, Shriner's Hospital for Crippled Children, and Maluhia Home. Students will have experience in the care of the child through an affiliation with Central Union Pre-School. Practice in the home care of the mother and new baby and chronic and convalescent cases is being planned in the hope that it will be possible to add a part time supervisor of home nursing to the present staff.

All practical experience will be closely supervised by a member of the hospital staff who is a well qualified professional nurse and who will work with the co-ordinating instructor.

The possibility of sending students back to their respective islands for a part or all of their clinical experience is being seriously considered. This will depend upon availability of hospitals that can furnish an adequate variety of services and well qualified individuals for supervision and continuance of the class work as planned for the period.

The student graduating from the course in practical nurse training will clearly understand the distinction between her own skills and those of a professional, registered nurse; the difference in the range and depth of training in the two fields and her relationship to the physician in charge and to the professional nurse. The untrained practical nurse frequently fails to realize these distinctions.

Students of the course will wear a standard uniform of an aqua colored Indian head material with white collar, cuffs and buttons. After graduation a cap of aqua and white will be added. This uniform will help to set her apart as a *trained* practical nurse. On graduation from the school the students will be eligible to take the licensing examination for practical nurses.

Rapid expansion of the school is being planned to meet the varied needs of the community. This will permit evening classes and part time day classes for persons already employed as practical nurses who cannot for financial reasons take the regular course.

As facilities become available on the other islands, practical nurse training schools will be set up there also. When such schools are established, many of the problems in regard to the securing of trained practical nurses on the outside islands will be solved.

* * *

NEWS ABOUT NURSING*

Approximately 40,000 new student nurses were enrolled in the nation's 1,227 schools of nursing during 1947, according to Emilie G. Sargent, Chairman, National Committee on Careers in Nursing.

This figure establishes a peacetime record. It indicates an increase of 1,900 students over the previous peacetime high in 1940 and 9,000 over the 1946 total.

Miss Sargent reported that the American Hospital Association's Student Nurse Recruitment Committee voted at its meeting in October to approve a goal of 50,000 new nursing students for the 1948 campaign. Proposed advertising layouts, copy and other materials have already been prepared by the J. Walter Thompson Company, which is volunteering service on the program.

The importance of the hospital to the community will be featured in addition to nurse recruitment promotion during the 1948 campaign. In preparation are a new series of newspaper advertising mats, national radio allocation, full colored mailing pieces for young women interested in professional nursing, an advertiser's campaign guide, car and bus cards, and outdoor billboard displays and posters.

A special public relations guide to aid the organization and development of a public relations program aimed at recruiting students will be mailed to all hospitals and schools of nursing this month, with supplements to follow.

The Women's Auxiliary of the American Medical Association has again pledged active assistance for the 1948 nurse recruitment campaign. Other civic and health organizations such as the Rotary International, The American Dental Association, the National Tuberculosis Association, the General Federation of Women's Clubs and the American Legion, cooperating in the 1947 drive, are being invited to continue support of nurse recruitment activities during the coming year.

* Release from Nursing Information Bureau

ANA ASSAILS PLAN TO USE PRACTICAL NURSES IN PLACE OF PROFESSIONAL REGISTERED NURSES*

Indiscriminate substitution of practical nurses for registered professional nurses to take over the major part of ordinary bedside nursing, as suggested by Dr. Morris Fishbein of the American Medical Association, was assailed by Ella Best of the American Nurses' Association as "detrimental and dangerous" to a patient's health.

Her opposition to Dr. Fishbein's views, which appear as an editorial in a recent issue of the health magazine *Hygeia,* was made known in a telegram to him.

"May we respectfully suggest that the solution of the nursing crisis does not lie in the training of more practical nurses to take over the major part of the bedside nursing in hospitals, as you were quoted by the Associated Press with a Chicago dateline as saying in *Hygeia.* We recognize that practical nurses fulfill a needed function but not this one. This step would be extremely detrimental and dangerous to a patient's welfare," Miss Best wired.

"In time of critical shortage of doctors it was not suggested that first aid technicians be substituted in their place. The same parallel exists between practical and professional nurses.

"The ANA program for practical nurses calls for increased utilization of their services if three precautions are taken: (1) Proper preparation and training of at least nine months in an accredited school. (2) State licensure for practical nurses to maintain standards of practical nursing and to weed out the incompetents. (3) Proper placement and supervision to make certain practical nurses are placed where they will not practice beyond their ability, and to insure their working under competent supervision.

"The American Nurses' Association holds that the crisis in nursing will be overcome only when the profession is made sufficiently desirable to attract and retain a sufficient number of qualified women on a basis of its professional status and economic stability. This rather than lowering the standards of nursing seems to be indicated in the public interest," Miss Best concluded.

Dr. Fishbein's editorial, pointing out the existence of a national nurse shortage of 42,000, suggested that the answer to the problem may lie in the training of more practical nurses to take over the major part of ordinary bedside care in hospitals.

* * *

HAWAII COUNTY NURSES' ASSOCIATION

In place of the usual Christmas party given by the Hawaii Nurses' Association, a CARE package was sent to Mrs. L. Nicol in England and another to a needy child in Europe. The Association also purchased a $15.00 tuberculosis bond. Mrs. Nicol, a charter member of our Association, moved to England to live just prior to the war.

* * *

The annual meeting was held on January 13, 1948, at the Hilo Memorial Hospital Nurses' Home. Membership has increased from 45 to 73 and 8 new members were welcomed at that time.

The Association sold 394 calendars which netted a surplus of $45.00 for the treasury.

The Jane Service Memorial Fund now totals $96.00 and a large number of books and magazines have been donated. The book plates and plaque are ready to use as soon as space is available in the new library.

Miss Uchima of the Hilo Memorial Hospital staff is now in New Jersey taking a post-graduate course in obstetrical nursing.

Mrs. Thelma Patten chose a blustery, cold winter to visit her family in Springdale, Connecticut. She has reported great enjoyment of her first real winter in over ten years.

MARY E. STANLEY, R.N.*

* * *

Hospital News

St. Francis Hospital, Honolulu

Graduation exercises for 23 nurses were held on February 8 at the Cathedral with Reverend James J. Sweeney, D.D., conferring the diplomas. The address was given by Reverend Edwin J. Kennedy, J.C.D. During the same service, the preliminary class were capped by the graduating students.

* * *

The demonstration Premature Unit was opened at St. Francis Hospital on January 3. The following graduates have recently joined the staff of this unit:

Mrs. Chu-Min Wong (Peiping Union Medical College School of Nursing, China)

Mrs. Sylvia Kalili (Queen's Hospital School of Nursing)

Miss Helen M. Olson (St. Mary's Hospital School of Nursing, Minnesota)

Miss Alice Hutzelman (Holy Name of Jesus, Alabama)

* * *

Other recent members of the nursing staff include:

Miss Harriet O. Abren (St. Mary's College of Nursing, California)

Miss Elda Marie Chesterman (Grace Hospital School of Nursing, Kansas)

Miss Dorothy E. Johnson (St. Mary's College of Nursing, California)

Miss Faye Kelsay (Providence Hospital School of Nursing, Oregon)

Miss Edna Louise Royer (Garfield Memorial Hospital, Washington, D. C.)

Mrs. Jane D. Lee Williams (Tewksbury State Infirmary, Massachusetts)

Miss Myrna G. Campbell (Methodist Hospital, Los Angeles)

Miss Campbell joins the staff as supervisor of the Outpatient Department. She was with the Red Cross Home Nursing Division prior to her taking the postgraduate course in tuberculosis nursing at Leahi Hospital.

Mrs. Maxine Marcusen (Alphonsus Hospital School of Nursing, Idaho)

* * *

Student Nurse Recruitment

The Territory of Hawaii League of Nursing Education has planned through the Educational Guidance Committee, Mrs. Reva Ridley, Chairman, to have student nurse recruitment carried out on the outside islands and Oahu at the request of the various schools. NLNE pre-entrance tests will be used by the three schools of nursing and the dates scheduled for testing are as follows:

Island of Kauai: Place—Kauai High School. Date: April 3, 1948. Time: 8:30 a.m.

Island of Maui: Place: Baldwin High School. Date: April 10, 1948. Time: 8:30 a.m.

Island of Hawaii: Place: Hilo High School. Date: April 17, 1948. Time: 8:30 a.m.

Island of Oahu: Place: McKinley High School. Date: April 24, 1948. Time: 8:30 a.m.

* Information released by Ella Best, R.N., Executive Secretary, American Nurses' Association, 1790 Broadway, New York City.

* Staff Nurse, Puumaile Hospital, Hilo.



THOSE in the medical profession in Hawaii agree that no other food is so important as MILK for lifelong health. MILK offers an abundance of the vitamins, minerals, proteins, carbohydrates and other essentials to normal growth in children and good health in adults. That is why doctors prescribe a quart a day for growing children and a pint a day for adults.

So much has been written and spoken about the value of milk in the diet that it would seem unnecessary to continue further explanations on the subject, yet those who have visited homes in Hawaii as doctors, nurses, sociologists and health workers know that continued work must be carried on.

Education and practical help in the recognition of milk as an important item in our diet will depend on our doctors and nurses, schools, public welfare and public health workers for many years to come.

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Why do Sally, Irene and Mary need vitamin D ?

Growing children require vitamin D mainly to prevent rickets. They also need vitamin D, though to a lesser degree, to insure optimal development of muscles and other soft tissues containing considerable amounts of phosphorus . . . Milk is the logical menstruum for administering vitamin D to growing children, as well as to infants, pregnant women and lactating mothers. This suggests the use of Drisdol in Propylene Glycol, which diffuses uniformly in milk, fruit juices and other fluids.

Average daily dose for infants 2 drops, for children and adults 4 to 6 drops, in milk. Available in bottles of 5, 10 and 50 cc. with special dropper delivering 250 U.S.P. units per drop.



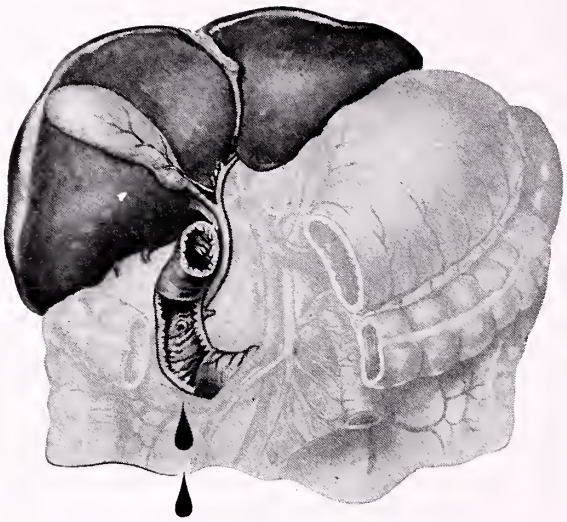
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*Albrecht, F. K.: Modern Management in Clinical Medicine, Baltimore, The Williams and Wilkins Co., 1946, p. 170.

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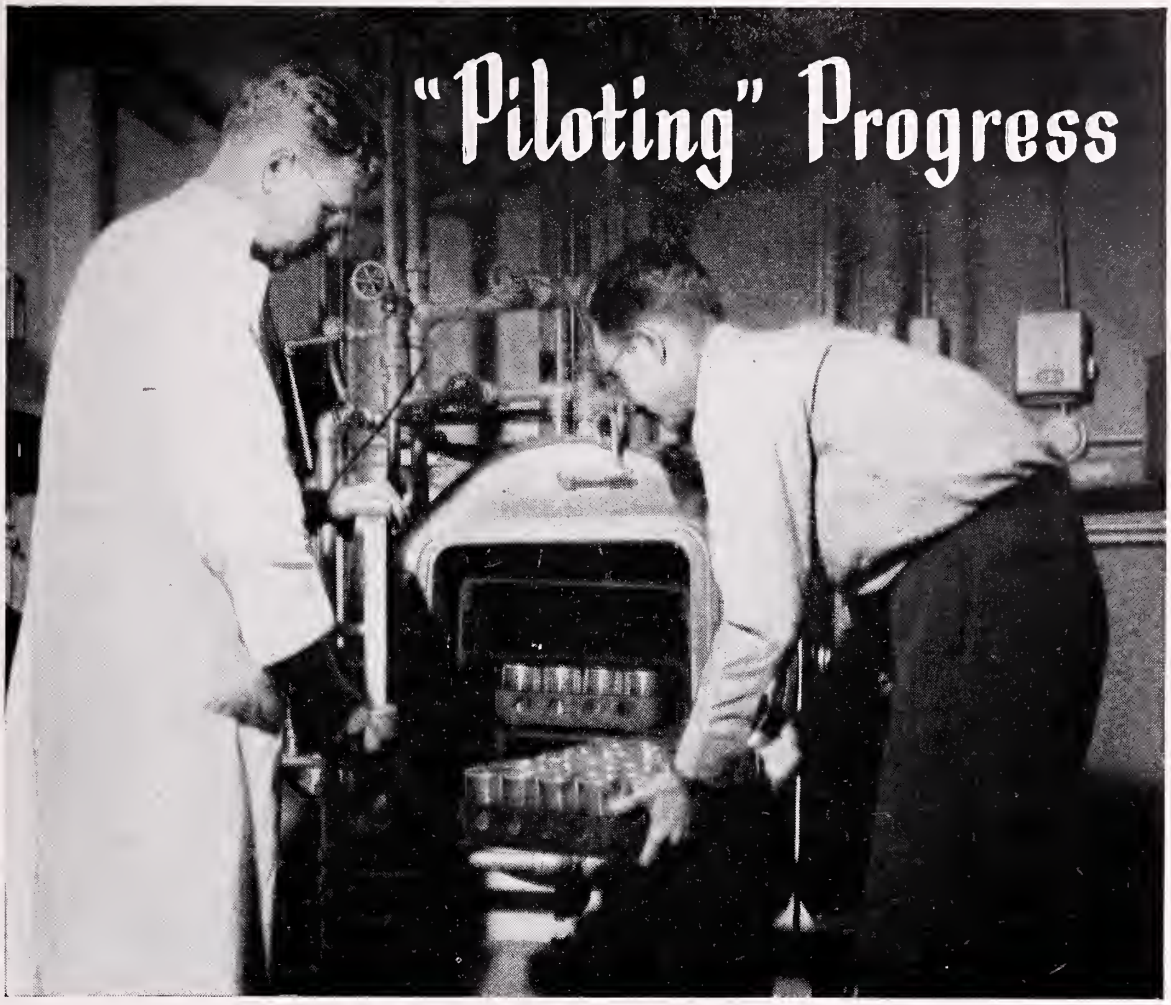
Perhaps you prefer to make your *own* test. Many doctors do. There is no better way to prove to your own satisfaction the superiority of PHILIP MORRIS.

* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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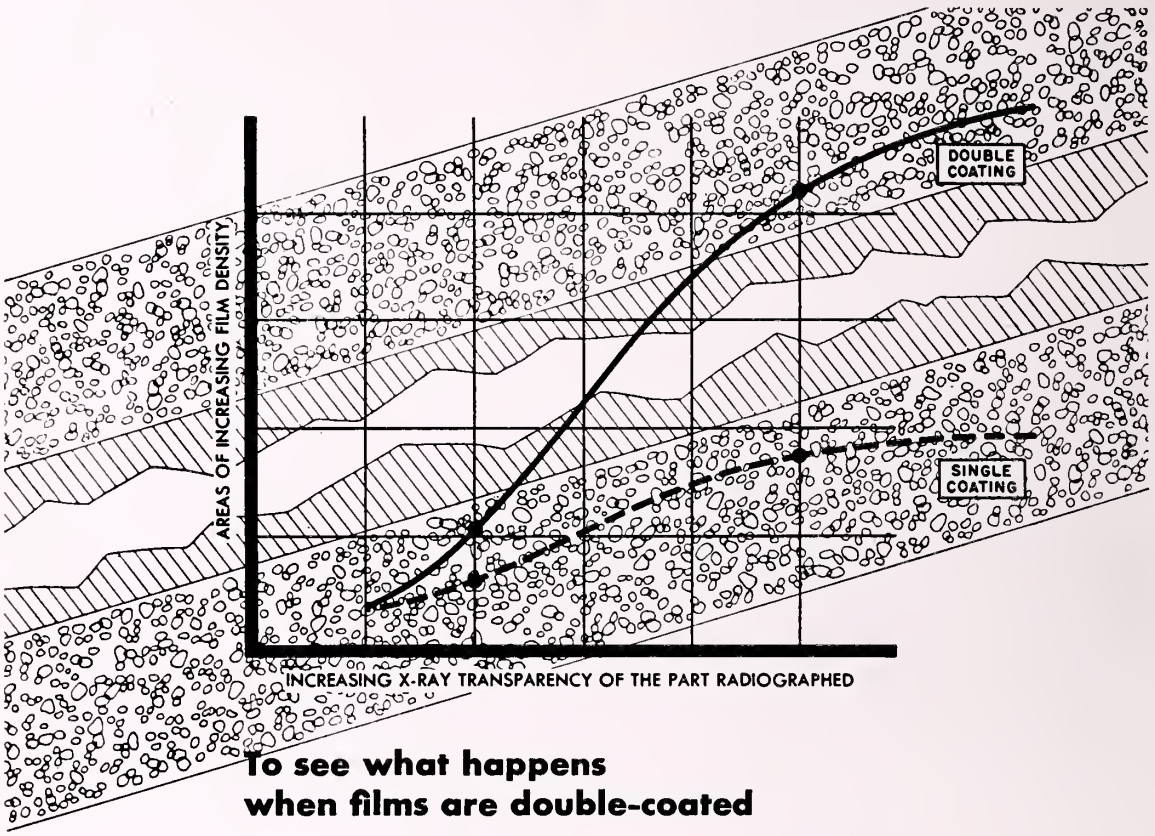
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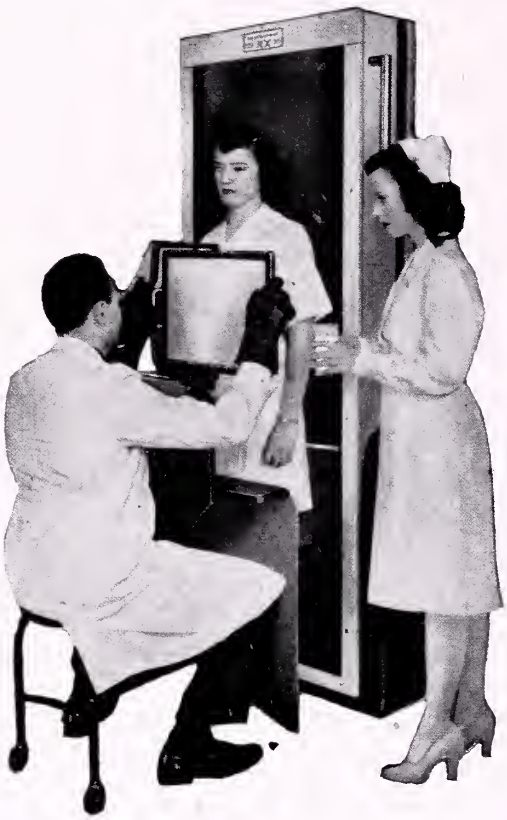
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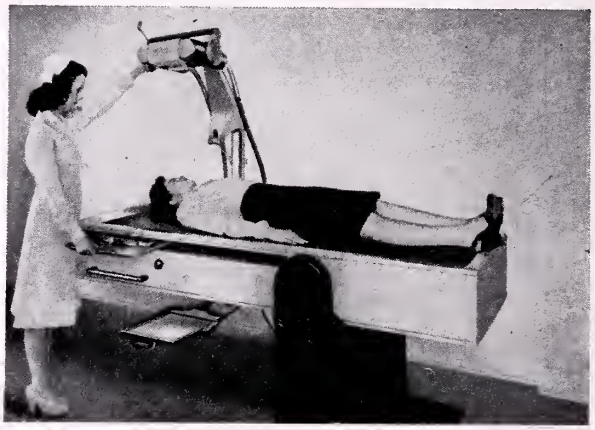
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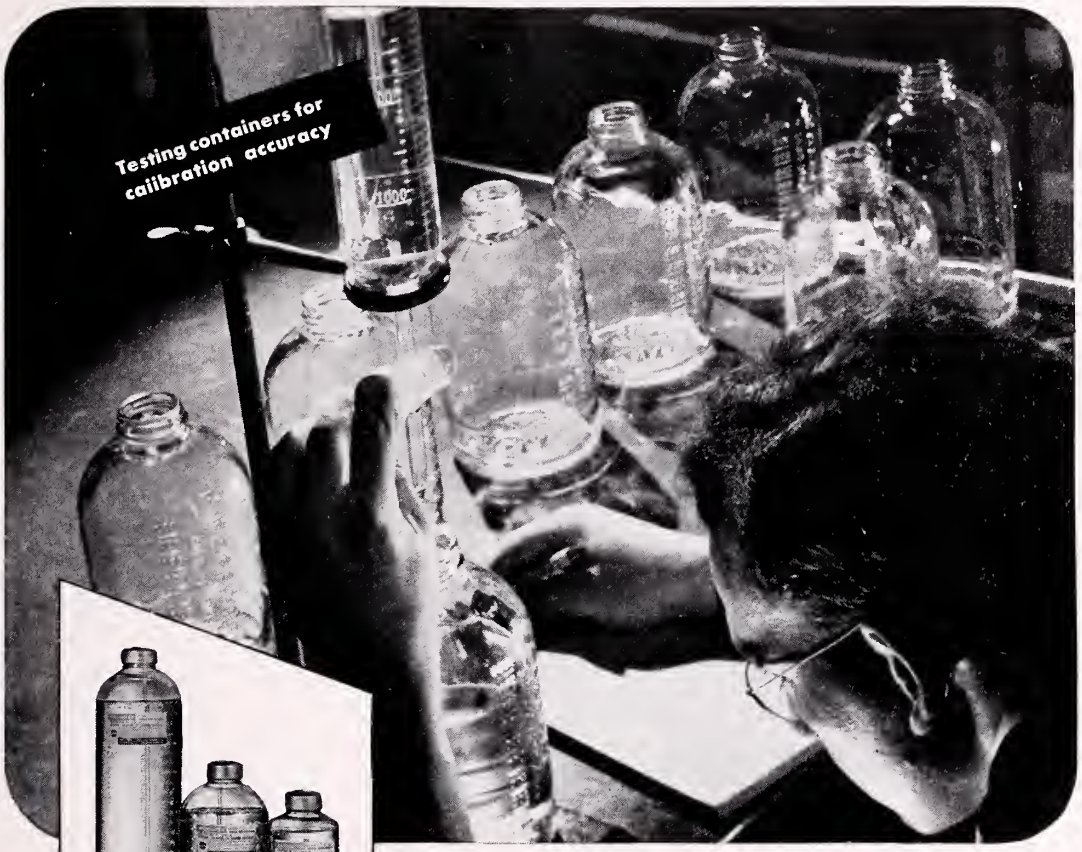
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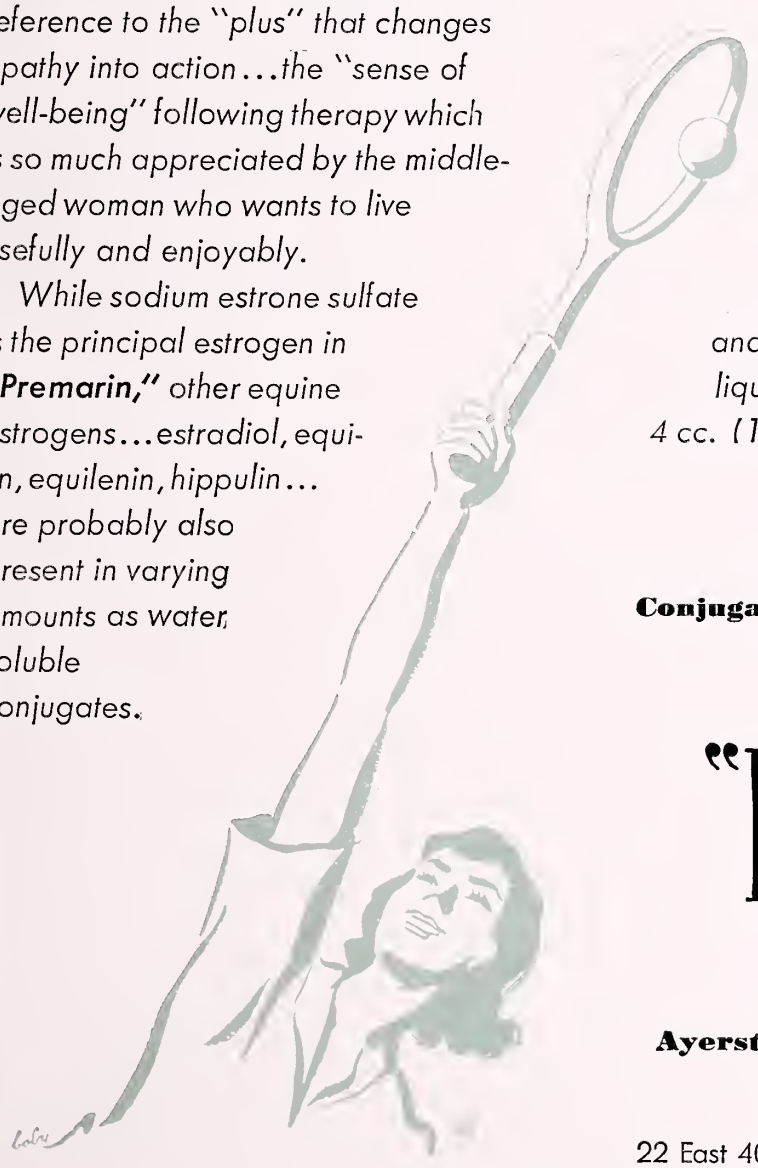
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1. Arbesman, C.E., et al., Jl. of Allergy 17:275, Sept. 1946
2. Feinberg, S.M., and Friedlaender, S., Am. Jl. Med. Sci. 213:58, Jan. 1947.
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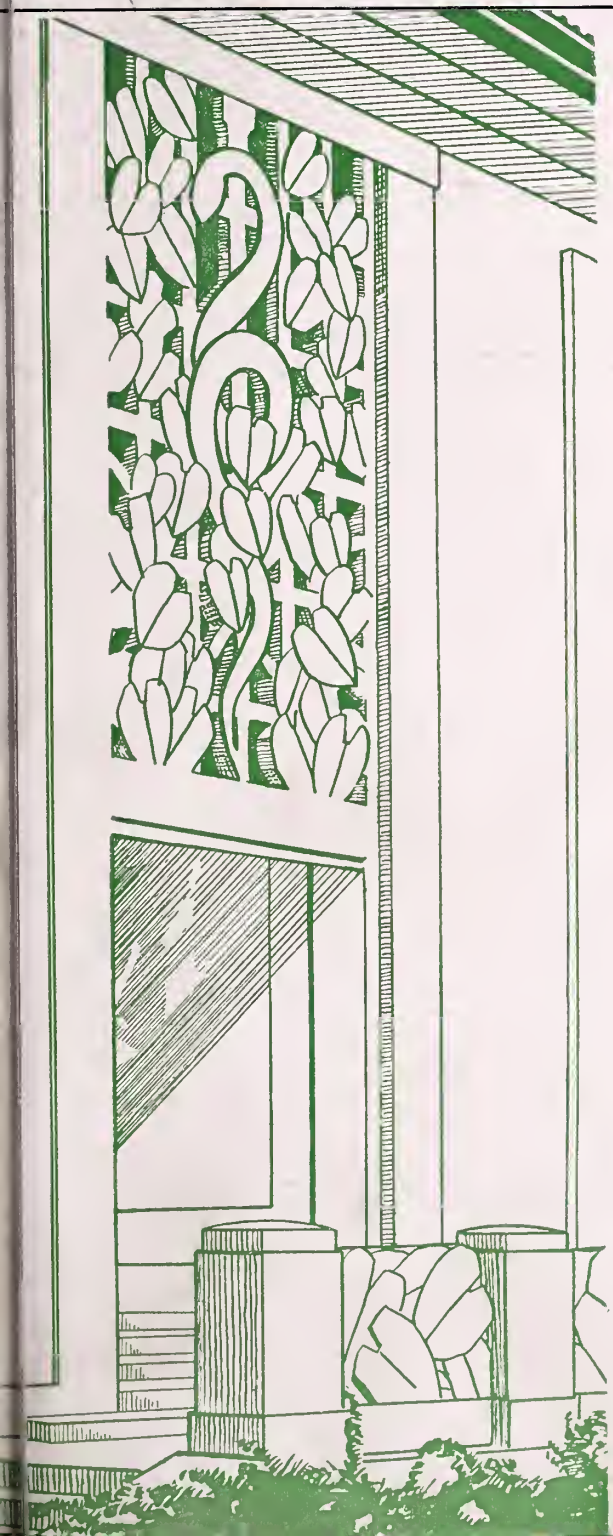
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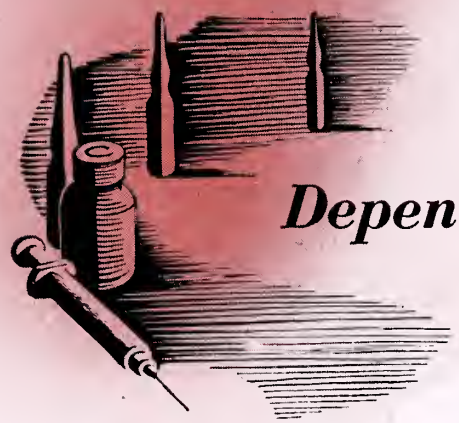
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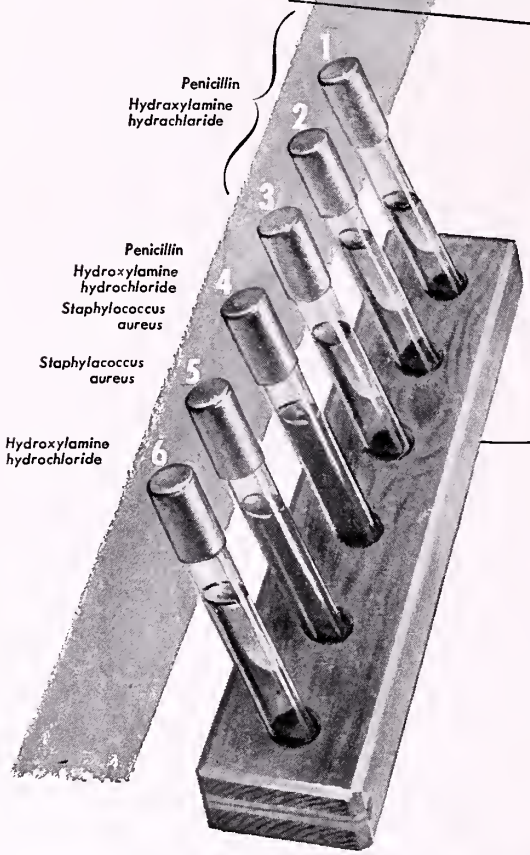
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1. Zondek, H.: The Diseases of The Endocrine Glands, ed. 4 (Second English), Baltimore, Williams & Wilkins Company, 1944, p. 421.

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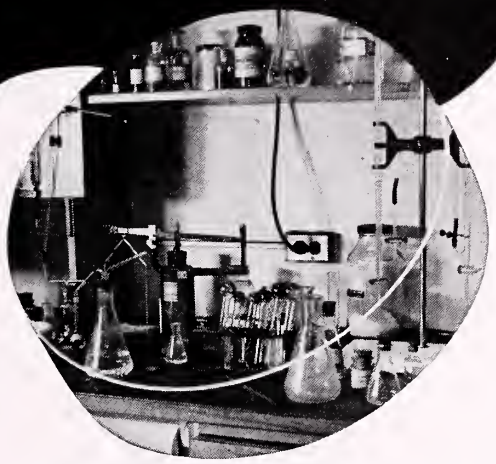
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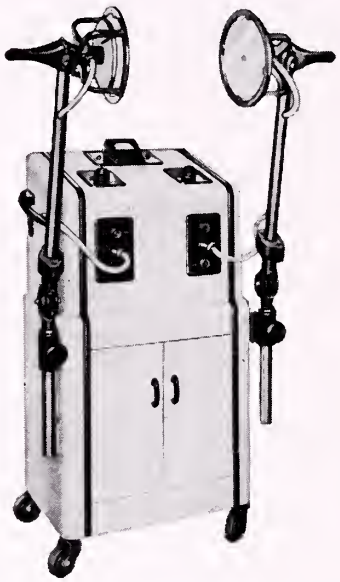
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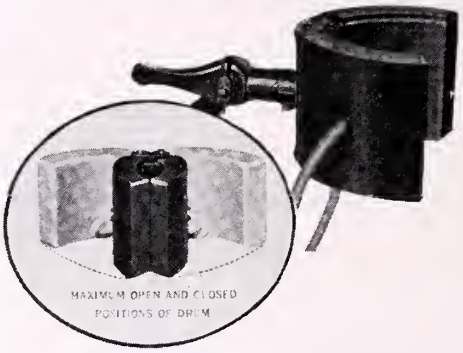
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For detailed discussion, see Alfred C. Beck: Obstetrical Practice. Baltimore, Williams and Wilkins Co., 4th ed., 1947, page 403.

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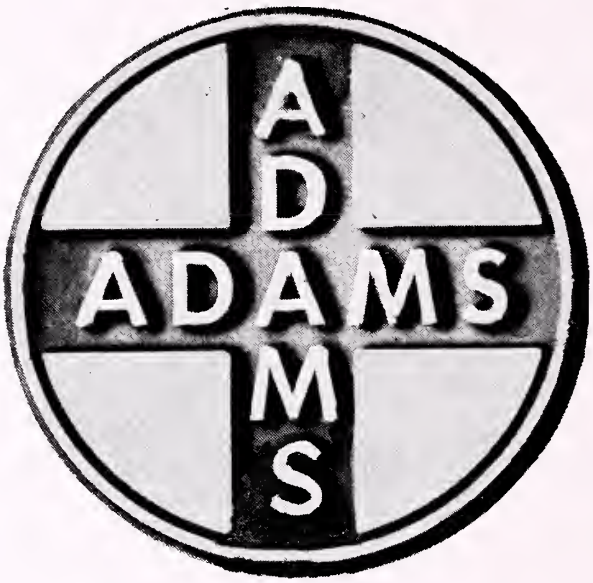
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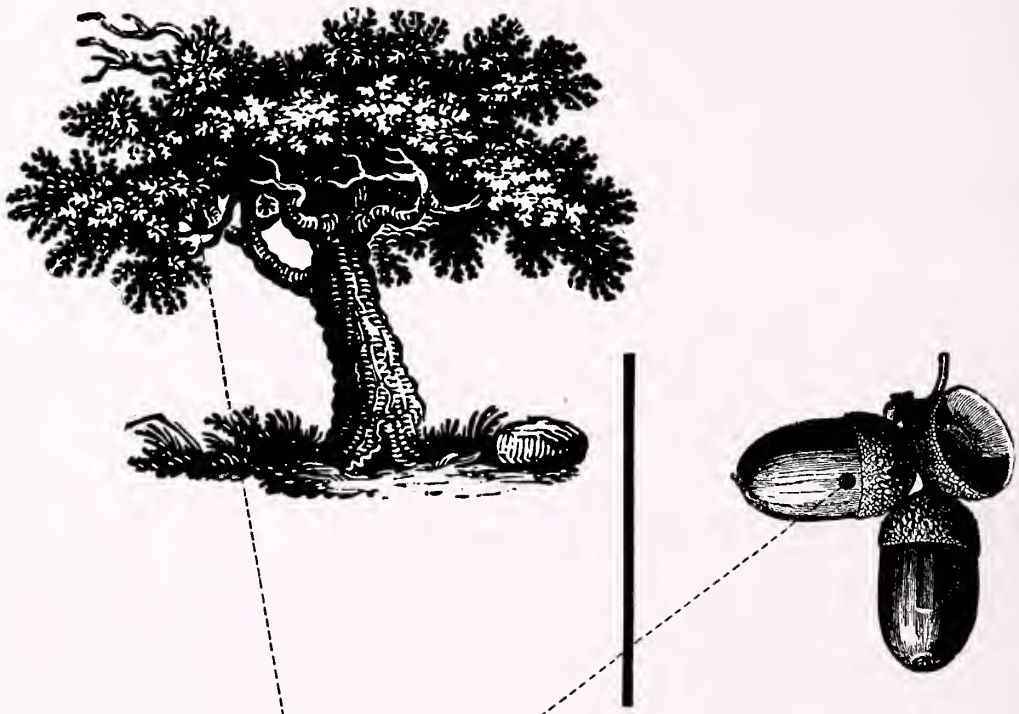
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Torula Meningitis

First Case to be Reported in Hawaii

RALPH B. CLOWARD, M.D.
HONOLULU

THE invasion of the central nervous system of man by a yeast is a rare and unusual disease, but one which occurs sufficiently often to warrant consideration in the differential diagnosis of every case of meningitis. It is, therefore, of interest to the internist and the syphilologist as well as the neurologist. Clinically, infection of the central nervous system by the yeast Torula histolytica may simulate tumor or abscess of the brain, Tuberculous meningitis, encephalitis and dementia paralytica. Frequently the true etiology is not revealed until the autopsy is performed.

Our knowledge of yeast infection in man originated in 1894 when Busse[1] discovered a yeast-like organism in a leg tumor of a man diagnosed as a sarcoma. The organism was first described by Von Hanseman[2] (1906) who recorded finding small gelatinous cysts containing yeast cells in the meninges of a man dying of meningitis. This was the first case of Torula meningitis reported. Rusk[3] recorded the first case of infection of the central nervous system by the yeast organism in this country in 1912. It was not until the monograph of Stoddard and Cutler[4] (1916) however, that the clinical and pathological features of the disease were clearly understood. These authors described the morphological and cultural characteristics of Torula histolytica (a term which they introduced) and showed it to be a true yeast, reproducing by budding only. They distinguished it from Blastomyces, which forms arthrospores, and Coccidioides, which develops endospores. Torula is also known as Cryptococcus humanis.

The paper by Freeman and Weidman[5] (1923) and the exhaustive monograph by Freeman[6] published in 1931 have added much to our knowledge of the disease. A review of the medical literature by Levin[7] (1937), Binford[8] (1941) and more recently Voyles and Beck[9] (1946) show a total of 110 cases of human Torula infection recorded. Of this number 54 were isolated infections of the central nervous system.

Only three, or possibly four, cases of Torula meningitis have been reported in children under the age of 10 years. The first case was described by Barlow in Australia[10] (1923) in a girl 3 years, 4 months of age. D'Aunoy and Lafferty[11] (1939) reported the case of a 7 year old colored boy who died of Torula meningitis forty-eight hours after admission to the hospital; the diagnosis was not made until the Torula was found in the spinal fluid cultured twelve days later. Longmire and Goodwin[12] (1939) observed a 4 year old colored girl with severe generalized torulosis. Autopsy showed the widespread systemic involvement sometimes seen in laboratory animals. Torula was found in the brain, meninges and skull, the lungs, spleen, liver, kidneys, pancreas, aorta and thyroid! The fourth case is listed, but not described, by Voyles and Beck.[9] The patient to be described in this report was 5½ years old, and is, therefore, the fifth case of Torula meningitis to be reported in a child. The average age incidence of Torulosis is about uniformly distributed over the active period of adult life, but cases have been reported from 3 years to 70 years of age.

The yeast organisms are thought to enter the body through the respiratory tract which explains the frequency of lesions found in the lungs. They may enter the body also through the skin or mucous membranes of the nasopharynx or intestine. The yeast may invade any of the parenchy-

[1] Busse, O.: Ueber Saccharomycosis Hominis, Virchows Arch. f. Path. Anat. 140:23, 1895.

[2] Von Hanseman: Uber ein bisher nicht beobachtete Gehirnerkrankung durch Hefen, Verhandl. d. deutsch. path. Gesellsch. 9:21, 1906.

[3] Rusk, G. V., and Farnell, F. J.: Systemic Oidiomycosis, Univ. Calif. Pub. Path. 2:47, 1912.

[4] Stoddard, J. L., and Cutler, E. C.: Torula Infection in Man, Monograph 6. Rockefeller Institute for Medical Research, 1916.

[5] Freeman, W., and Weidman, F. D.: Cystic Blastomycosis of the Cerebral Grey Matter caused by Torula Histolytica (Stoddard and Cutler), Arch. Neur. and Psych. 9:589, 1923.

[6] Freeman W.: Torula Infections of the Central Nervous System. J. F. Psychol. u. Neurol. 43:236, 1931.

[7] Levin, E. A. Torula Infection of the Central Nervous System. Arch. Int. Med. 59:667, 1937.

[8] Binford, C. H.: Torulosis of the Central Nervous System: Review of Recent Literature and Report of a Case. Am. J. Clin. Path. 11:242-251, (March) 1941.

[9] Voyles, G. Q., and Beck, E. M.: Systemic Infection Due to Torula Histolytica (cryptococcus Hominis). 1. Report of Four Cases and Review of the Literature. Arch. Int. Med. 77:504-515, (May) 1946.

[10] Barlow, D. L.: Primary Blastomycotic Meningitis occurring in a Child. M. J. Australia, 2:302, 1923.

[11] D'Aunoy, R., and Lafferty, D. R.: Torula Meningitis in a Child. Am. J. Clin. Path. 9:236, 1939.

[12] Longmire, W. P., and Goodwin, T. C.: Generalized Torula Infection. Case report with review and observations on pathogenesis. Bull. Johns Hopkins Hosp. 64:22, 1939.

matous organs and has also been found in the skin, subcutaneous tissues, lymphnodes, tongue and muscles of the back and pelvis. There is, however, a much greater affinity and predilection for brain, meninges and spinal cord. The purulent meningitis which results is slow to develop, becoming subacute, then chronic, and is always fatal. Most patients die within six months, the meningitis cases sooner. If the patient survives the initial infection he may live two to four years and finally succumb. No one has ever demonstrated that the body is capable of developing an immunity to the organism. Hoff[13] was unable to produce it in mice experimentally.

The yeast organisms vary from 1 to 13 microns in diameter and have a deeply stained wall which in larger forms appears as a double line. Reproduction is by budding, occurring usually in medium sized and large forms. All stages are seen from a small bud-like projection from the circumference of the organism to dumb-bell forms where the mother and daughter cell are of equal size. Finally, the two bodies separate, though occasionally they continue to be connected by a pink-staining band. Usually the daughter cell breaks off when it reaches one-half to two-thirds the size of its parent. These organisms may be missed or go unrecognized clinically because of the failure to culture them on the appropriate media or to permit them to grow for a sufficiently long period of time. They are frequently mistaken for white blood cells in examination of the spinal fluid.

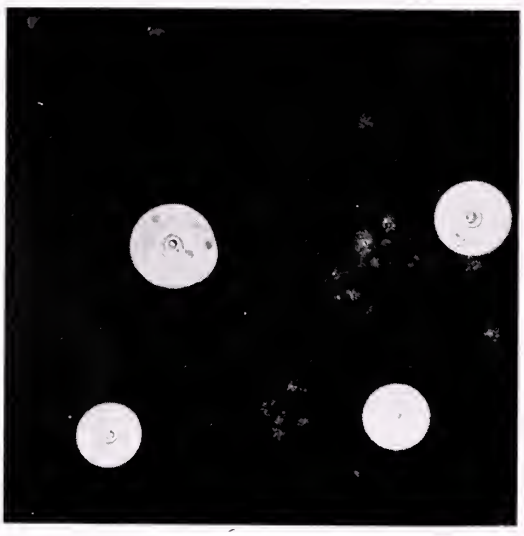


Fig. 1 (a).—India ink preparation.

In Torula meningitis, the spinal fluid is under increased pressure. It may be clear, but is usually turbid or xanthochromic. The cell count may be as low as 3 and as high as 1000 cells per cu. mm., the average count being between 200 and 800, predominantly lymphocytes. A pellicle usually forms, albumin and globulin are increased, and the sugar and chlorides may be very low. These spinal fluid findings may be identical with those of tuberculous meningitis and differentiated from it only by finding the organism. The yeast cells can be recognized on a direct smear or centrifuged specimen when stained with India ink. Budding forms are easily seen. Cultures are made on blood agar, beef infusion glucose agar at 37° C., and Sabouraud's glucose agar at room temperature. On the latter organisms grow slowly, producing a pearly white, wrinkled, granular, yeast-like colony.

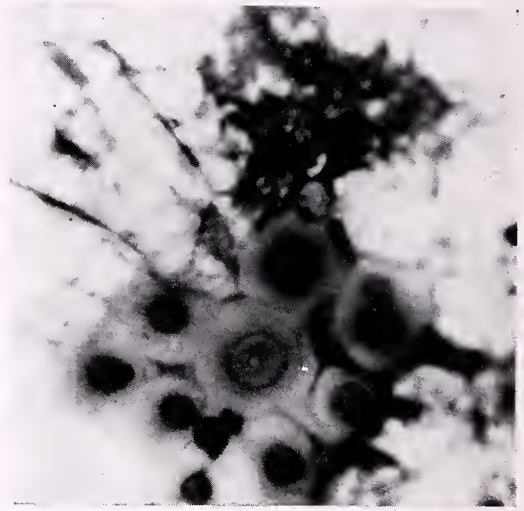


Fig. 1 (b).—Acid fast stains of pellicle demonstrating budding forms and wide capsule.

Since the involvement of the central nervous system is the most constant feature of systemic torulosis and invariably the cause of death, the clinical picture is that of slowly developing meningitis, brain abscess or tumor. Occasionally the onset may be sudden with violent excruciating headache and vomiting. More often, however, the headache is intermittent, increasing in intensity and severity. Other symptoms suggesting increased intracranial pressure develop: vertigo, stiffness of the neck, irritability, mental disorders and often signs of focal brain lesions. Ophthalmoplegias, papilledema, muscle rigidity and positive Kernig's sign are found on examination, as well as focal neurological signs. The course is progressively downhill, to death. The temperature is of septic

[13] Hoff, C. L.: Immunity Studies of Cryptococcus hominis (Torula Histolytica) in Mice. J. Lab. Clin. Med. 27:751-754, (March) 1942.

character, usually below 101° F., although in children it may be much higher.

The characteristic pathological lesions found at autopsy are the miliary nodules which resemble tubercules both grossly and microscopically. They may be found in the spleen, perisplenic lymph nodes and lungs. The early lesions are miliary abscesses with disintegrating polynuclear, mononuclear white cells and yeast organisms within a loose capsule. The older lesions are organized, with fibroblasts, and show many giant cells. They may even calcify. The torula usually are found free in the tissue but may be found within these giant cells. In the central nervous system the yeast produces a gelatinous appearing material in the meninges. This inflammatory granulomatous process glues the arachnoid membranes and is invariably fatal. The torula follows the blood vessels and invades the brain. The parenchymatous lesions, resembling cysts or abscesses, contain the torula organisms but produce very little glial reaction about them.

Mezey and Fowler[14] reported the cure of a case of cerebrospinal torulosis with a solution of 5 per cent alcohol and dextrose administered intravenously. Prior to the report of this case the mortality of this disease was 100 per cent. These authors suggest that this treatment combats the toxemia due to toxins released by the budding cells. More experience with this form of therapy is needed to test its value.

The following case is of interest because it is the first case of torula meningitis to be reported in Hawaii. According to the records of the Territorial Board of Health no case of Torula originating in Hawaii and occurring in a native of these islands has been recorded. Two cases of torulosis were reported to the Board of Health during the last war, but these occurred in service personnel whose infections were known to have originated outside the Hawaiian Islands.

Case Report

R. K. (Children's Hospital #45,540) a 5½ year old boy of Chinese-Hawaiian extraction, was born in Honolulu and had spent his life on the island of Oahu. He first became ill on December 28, 1946 and was treated by Dr. Garton Wall for an acute upper respiratory infection and an acutely inflamed ear. There was a history of bilateral otitis media. On January 4, 1947 he was hospitalized at the Ewa Hospital because of fever, headache, pain in the neck and right ear, and extreme irritability. A spinal puncture revealed normal pressure and clear fluid. The following day he began having convulsions involving primarily the left side of the body, following which there developed weakness of the left extremities.

The patient was transferred to the Children's Hospital on January 8, 1947 under the writer's care. The admission temperature was 100.8°, the white blood count 21,750. He was listless but cooperative; his neck was very stiff; the left extremities were paralyzed. The fundus of the eyes showed a papilledema of 2 diopters. The admission diagnosis was right temporal lobe abscess of the brain, secondary to an otitis media.



Fig. 2.—Yeast colony on Sabouraud's medium—2 weeks growth.

An exploratory trephine operation was made above the right ear but revealed no evidence of a brain abscess. The arachnoid over the temporal lobe appeared normal. A pneumoencephalogram was then done. The cerebrospinal fluid pressure was increased to 270 mm. of water. Ninety cc. of clear, colorless fluid was removed and replaced by sterile oxygen. No evidence of a mass could be demonstrated in the x-rays of the brain, which appeared normal. A diagnosis of localized meningitis was made, and the patient placed on large doses of penicillin and sulfadiazine.

The cerebrospinal fluid examinations were made in the laboratory of the Board of Health, then under the direction of Dr. Richard K. C. Lee. The first specimen contained 450 cells per cu. mm., 67 per cent polymorphonuclears; 114 mgm. per cent total protein, and a pellicle. The cells seen in the smear made after centrifuging the specimen were recognized by Miss Marguerite Beatty, bacteriologist for the Board of Health laboratory, as

[14] Mezey, C. M., and Fowler, Roger: Cerebrospinal Cryptococcosis. J.A.M.A. 132:632, Nov. 16, 1946.

being yeast cells. Acid-fast stains as well as wet India ink preparations were made. Both showed numerous budding yeast forms having a wide capsule (Fig. 1.). The cultures grown on Sabouraud's medium at room temperature grew slowly. The colonies could be seen only microscopically after seventy-two hours, and could not be seen grossly until seven days. They eventually grew to 4 cm. in diameter (Fig. 2) and became a cream color. The positive diagnosis of cryptococcic meningitis was returned. These findings were duplicated by the laboratory of the Children's Hospital.

A guinea pig injected intraperitoneally with a suspension of the culture was sacrificed after two months and examined by Dr. I. L. Tilden, pathologist of The Clinic. At the point of injection



Fig. 3 (a).—Cerebral hemispheres showing thick creamy exudate filling subarachnoid space.

a hard mass or granuloma had developed which contained yeast-like cells. A culture from this material showed a growth similar to that already described. The organs seemed to be normal grossly except for the lungs. These were covered with numerous clear nodules 1 to 2 mm. in diameter which contained the yeast organisms.

The patient remained in the hospital twenty-four days before he expired. The temperature ranged in a septic fashion between 97°-98° F. in the morning and 103°-104° F. in the afternoon, terminally reaching 108°. He was conscious the first two weeks, progressing to deep coma. The left extremities remained paralyzed, the neck very stiff and painful. Papilledema increased to 4 diopters and massive retinal hemorrhages developed. Treatment with penicillin, sulfadiazine and alcohol did not alter the progressive downhill course. He died twenty-eight days after hospital admission and thirty-six days after the onset of the illness.

A complete autopsy was performed by Dr. T. Fujiwara, pathologist for the Children's Hospital, twelve hours after death (body preserved in ice box). A thorough search, grossly and microscopically, of the organs of the body, failed to disclose the torula organisms. The infection was found only in the central nervous system. The leptomeninges over the entire brain were thickened and opaque. The subarachnoid space was filled with gelatinous creamy exudate which obliterated all superficial markings. The surface of the

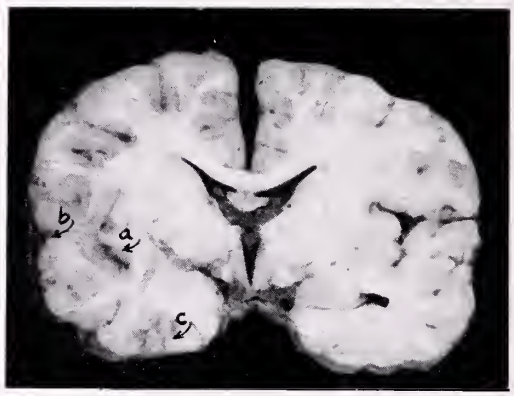


Fig. 3 (b). — Coronal section of brain. Note: (a) Edema with obliteration of right island of Reil. (b) Thrombosed vessels. (c) Cortical abscess.

spinal cord had a similar appearance (see Fig. 3). Coronal sections of the brain revealed marked edema of the entire right cerebral hemisphere. The large superficial cortical veins in the region of the island of Reil were solidly thrombosed. The purulent exudate filled all cerebral sulci in the right temporal, parietal and occipital lobe, spreading into the grey matter to form small, sharply circumscribed, translucent cysts or abscesses. These were numerous throughout the right occipital lobe varying in size up to 1½ cm. in diameter. The infection in the left cerebral hemisphere was grossly confined to the meninges.

Microscopically a chronic inflammatory process was found in the meninges. The exudate was made up largely of lymphocytes and plasma cells, with a few polymorphonuclear leucocytes. Giant cells were quite numerous, having from 10 to 20 nuclei grouped either in the center or at the periphery of the cell. The Torula organisms were found scattered throughout the meninges, and

budding forms were numerous within the giant cells. The cysts in the brain tissue appeared as small cavities with strands of necrotic brain tissue running from one wall to another. There was very little glial reaction about the cyst walls. Moderate round-cell reaction was found about the adjacent vessels. Large numbers of organisms were seen lying in the necrotic material filling the cysts. The spinal meninges resembled those of the brain except the organisms were fewer.

Comment

This case is reported to illustrate the fact that meningitis due to the yeast Torula histolytica can and does occur in Hawaii. Although this is the first case to be recorded in Hawaii, it is believed other cases must have occurred but were unrecognized. In patients with clinical meningitis whose spinal fluid does not show organisms on routine culture media, a tentative diagnosis of tuberculous meningitis is usually entertained. The fluid contains round cells, thought to be lymphocytes; and the cell count, protein, sugar and chloride content are identical with those of tuberculous meningitis. If the possibility of Torula meningitis is kept in mind, more of these cases may be found, recognized and differentiated from tuberculous and other forms of meningitis.

Summary

1. A fatal case of meningitis due to a yeast, Torula histolytica, is reported in a 5½ year old part-Hawaiian boy, a native of Oahu.

2. This is the first case of Torula meningitis to be recorded in the Hawaiian Islands and the fourth case to be described in the medical literature occurring in a child.

3. The clinical, pathological and bacteriological characteristics of the disease are described.

388 Young Building

Some Aspects of the Tuberculosis Problem in Hawaii

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DURING the x-ray campaign that was carried on in this city during the first six months of 1947, many previously unrecognized cases of tuberculosis were discovered. Many of the cases of tuberculosis, as well as of other conditions detectable by the small film chest x-ray, found their way to the offices of the private physician. This survey imposed quite a burden on the tuberculosis control facilities of this community, and emphasized the necessity for adequate control measures.

It is now pertinent, therefore, to review briefly some of the aims and methods of our tuberculosis control program. There are two objectives involved in the control of tuberculosis. First, there must be produced an environment which discourages the propagation of tuberculosis by improvement of the socio-economic condition of the people. This is by some considered the most important factor in tuberculosis control.[1] Always, where there is unsanitary and crowded housing, ignorance, inadequate diet and poor living habits, there is a serious tuberculosis problem. Much of the improvement in these categories depends on community effort and reform, but the health department does exert effort toward health education, dietary instruction and improved sanitation and housing. The second objective is to eliminate the foci of infection, which is why so much effort is expended in finding the many unrecognized cases and in obtaining their proper treatment and isolation. It is also the reason for the existence of the free chest clinics. It is the reason for the statute which requires the Board of Health to make an examination for tuberculosis of anyone who applies. The reporting of cases of tuberculosis is as much for the purpose of finding the source or examining contacts as it is to be assured that the patient is under medical supervision. When I went to medical school and was in private practice I was imbued with the idea that routine serological tests for syphilis were almost an essential. Likewise, if the general practitioner were to do a tuberculin test routinely on his medical patients at least, with x-rays of the positive reactors, many early and previously unrecognized cases of tuberculosis would be discovered.

We have just written a chapter on tuberculosis for the public health regulations, which was approved by the Board of Health on January 15 after a public hearing. In these regulations there are provisions:

that a physician should report a case of tuberculosis under his care even though it is known to have been reported previously by someone else;

that reportable tuberculosis shall include all reinfection type tuberculosis, active or inactive, and including pleural effusion of unknown etiology and active primary infection;

that foodhandlers and school teachers should be x-rayed before employment and yearly thereafter;

that a person who is known or reasonably suspected to have tuberculosis can be required to be examined by a physician approved by the Board of Health.

This latter provision is to enable the Board of Health to obtain examination of the possible source of cases of tuberculosis, especially when the reported or discovered case is an acute process, such as meningitis or miliary tuberculosis in children or young persons and to obtain suitable diagnostic procedures on individuals who are found in routine examinations to have x-ray evidence of what could be an infectious process.

I would like to state here that one of the functions of the chest clinics is to assist the private physician as much as possible in the diagnosis of tuberculosis. The private physician may refer anyone to the chest clinics, especially those who for financial reasons would not otherwise get an x-ray. It is requested that these referrals be accompanied by a brief history or the reasons for the x-ray. If the purpose of the examination is of a routine nature a small film is taken. If suspicious symptoms are present, a standard size film is obtained.

Any discussion of procedures or reasons for tuberculosis control must take into consideration an accurate picture of the problem as it exists.

Two well-known facts regarding tuberculosis in the territory are the comparatively high mortality rate from tuberculosis and the presence for the past few years of a long waiting list for Leahi Hospital. Taken by themselves without further explanation, these facts might give an erroneous

Read before the Honolulu County Medical Society, January 9, 1948.

[1] Rich, A. R.: The Pathogenesis of Tuberculosis, Charles C. Thomas, Springfield, Illinois, 1946, p. 892.

impression of the true nature of the tuberculosis problem here.

It is true that the tuberculosis mortality rate here is exceeded by only five states, the District of Columbia, Alaska, and Puerto Rico.[2] Nine per cent of the total deaths from all causes are due to tuberculosis, whereas the proportionate mortality figure for the United States is 4 per cent.[3]

And there *is* a long waiting list for Leahi, with patients sometimes waiting months for a bed.

From these two conditions—the high mortality rate and the long waiting list—it is obvious that our tuberculosis control problem is serious. But it is also true that our territory does not constitute a tuberculous milieu—a region of tuberculosis infestation. It is not a locality where tuberculosis runs rife. There are certain features found in a further study of the disease here which permit encouragement, even a degree of optimism. A more complete picture of the tuberculosis situation can be obtained by a study of the following facts:

1. The mortality rate from tuberculosis here has dropped since the turn of the century at about the same rapid and satisfying rate as on the mainland, and this in spite of the influx into the territory during the past forty years of racial groups coming from countries where tuberculosis is practically in an epidemic form. During the war years, it is true, the decline in the death rate did cease; but last year it dropped from its war year average of 56 to a low of 49 deaths per 100,000 population.

2. The tuberculosis death rate for the City and County of Honolulu compares favorably with the tuberculosis mortality in mainland cities of comparable size. The average tuberculosis death rate for Oahu for the three years 1945-1947 was 49.2. The United States Public Health Service in their reports on the tuberculosis mortality statistics for the United States lists 92 cities with a population over 100,000. Of these 92 cities, exactly one half have a higher rate than does the City and County of Honolulu. Honolulu's tuberculosis death rate is a median. These Public Health Service reports further list 40 of these cities which have over 10 per cent non-caucasian population. If Honolulu were included in the U. S. Public Health Service reports—as it would be if we were a state —Honolulu would be in this group. Of these cities there are only 3 which have a (crude) tuberculosis mortality rate lower than Honolulu's; 37 have a higher rate. Also the proportionate mortality rate—the number of tuberculosis deaths in every 100 deaths from all causes—in Honolulu is 10; that is, 10 per cent of the deaths from all causes are tuberculosis deaths. There are 16 of these 40 cities with over 10 per cent non-caucasian population with this proportionate mortality rate over this figure.[4]

3. There is a tremendous influence on our tuberculosis death rate brought about by the difference in tuberculosis among our several racial groups. I can show that many of our tuberculosis deaths occur among racial groups comprising a relatively small segment of our population. For instance, the Hawaiian group, comprising but 2 per cent of the entire population, accounts for 11 per cent of the tuberculosis deaths. The Filipinos, with but 10 per cent of the population, account for 25 per cent of the deaths from tuberculosis. Over two-fifths of the tuberculosis deaths are in racial groups comprising but about one-eighth of the population. Over 20 per cent—or one out of every 4 or 5—deaths in the Filipino group is due to tuberculosis. On the other hand, the Caucasian group, about one-third of the population, accounts for only 7 per cent of the tuberculosis deaths.

4. It would be interesting to compare the mortality rate from tuberculosis of some of the races here with that of these same races elsewhere. The Caucasian tuberculosis death rate here is 10. I know of no mainland community—even predominantly rural—which has a lower rate. The people of Japanese ancestry—about one-third of our population—have a rate of 52. This is just about half the tuberculosis mortality rate of persons of Japanese ancestry living in the United States,[5] and but a fraction of the tuberculosis death rate in Japan today. From reports from the Philippines, the death rate there is at least two or three times the rate among Filipinos here, and never did in the past come down to the figure of 132 deaths per 100,000 which is the rate among this group in the territory.

5. Another interesting and unusual feature of tuberculosis here is the comparison of the death rates of rural and urban communities. On the mainland, the more dense the population of the community—the larger the city—the higher is the mortality rate from tuberculosis. In the territory the reverse is true. Oahu, predominantly urban, had a tuberculosis death rate for the three years 1945-1947 of 49, while Maui and Kauai's rate for that same three year period was 55 and the

[2] Yerushalmy, J., and Moriyama, I. M.: Tuberculosis Mortality in the United States and in Each State, 1944. Pub. Health Rep. 61: 502, (Apr. 5) 1946.

[3] National Tuberculosis Association, Medical Research Committee: Tuberculosis in the United States—Graphic Presentation, Vol. 2 (1944).

[4] National Tuberculosis Association—Medical Research Committee: Tuberculosis in the United States. Vol. 3 (1945). Pitney, E. H., and Kasius, R. V.: Tuberculosis in Major Cities: United States 1944, Pub. Health Rep. 61:1448, (Oct. 4) 1946.

[5] Boardman, D. W.: Tuberculosis Among Persons of Japanese Ancestry in the United States, Am. Rev. Tuberc. 54:227, (Sept.) 1946.

Big Island's rate was 66; and these other islands are predominantly rural. Even Hilo has a lower rate than rural Hawaii. This can for the most part be accounted for by the racial composition of the plantation and rural communities. In the rural areas live a high proportion of peoples who have the higher tuberculosis mortality.

6. Mention should be made of the effect of the sex and age composition of the population on the overall tuberculosis rates. Tuberculosis morbidity and mortality rates are higher in males than in females. This is as true on the mainland as it is here. This partly explains the high death rate among Filipinos in which group males outnumber females by a high margin. Also, the ratio of males to females in the territory is about 1.5 to 1. The territory has a higher proportion of people in the younger age group—a younger population—than does the United States as a whole. Tuberculosis has been and still is the chief cause of death from disease in the younger adult group. More people die of tuberculosis in the young adult group than from any other cause, excluding accidents.

7. During the past three or four years almost 300,000 people in the territory have been x-rayed by the mobile units. The prevalence of the disease as determined by these surveys has been only slightly higher than is shown in similar surveys on the mainland, and the percentage of cases considered to be significant—either active or questionably so—is roughly about the same here as in similar studies in the United States. On Oahu, in plantations and industries, about 1.5 per cent are found with reinfection (adult) type tuberculosis. Roughly, about one-fourth to one-third of these cases are considered to be in need of either sanatorium care or close observation, and the remainder are presumably arrested. In a Japanese war relocation camp in 1945 in the Western United States, supposedly composed of a representative group of people of Japanese ancestry living in the West, 3.9 per cent were found to have adult type tuberculosis,[5] as compared to a prevalence of 1.5 per cent in 11,000 people of Japanese ancestry x-rayed by us on Oahu in 1946. In our recent city-wide x-ray campaign when 92,000 people were x-rayed, 886 or less than 1 per cent were found with x-ray evidence of reinfection or adult type tuberculosis.

Now for a consideration of the hospital bed situation. I feel the waiting list and present insufficiency of hospital beds is chiefly due to an unusual demand brought about as a result of, first, the intensive x-ray surveys that have been carried out in the past three or four years, and second, the unusual willingness of the population to accept hospital care. The benefits of sanatorium care have been well sold, and it speaks well for the quality of care rendered in our sanatoria. Not being officially connected with Leahi, I can say that with impunity. The data show that a much higher proportion of tuberculosis deaths in Hawaii occur in the sanatorium than in the average community on the mainland. In other words, in the territory the majority of cases at the time of their greatest infectivity, are isolated. Very few patients are discharged from Leahi with a positive sputum, or against advice, as compared with the reports of the percentage of such discharges from sanatoria in the United States. The waiting list for Leahi, before the opening of the annex last year, was over 100. Coincident with the opening of the annex, Puumaile Hospital was abandoned because of storm wave damage and 90 Hawaii patients were transferred to this island. In spite of this the waiting list was considerably reduced. After the city-wide survey this spring, the waiting list has again been increased to over 100 patients. The building program in process at Leahi will however eventually allow us to assure everyone who needs it a bed.

These qualifying data should not be construed as a minimization of the importance of continued emphasis on tuberculosis control in Hawaii. I would like to restate the fact that between the ages of 15 and 40, tuberculosis is still the chief cause of death from disease. Cancer and heart disease, it is true, have a greater mortality rate than does tuberculosis; but they are essentially degenerative diseases. The median age at death from these conditions approximates the life expectancy at birth.[6]

Tuberculosis therefore constitutes a serious social problem because of the comparatively younger age of the cases and deaths, and because it is communicable. Continued efforts for a long time to come will be necessary before tuberculosis is relegated to the list of minor diseases.

[6] Dempsey, M.: Decline in Tuberculosis; the Death Rate Fails to Tell the Entire Story, Am. Rev. Tuberc. 56:157, (Aug.) 1947.

Department of Health

Simple Diet Methods for Estimating Toxicity and Antibacterial Activity of New Compounds in Mice*

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THE purpose of this report is to set forth in detail the diet methods which were developed for screening tests on new compounds. These methods, previously referred to in a paper on Furacin by Dodd,[1] were established as routine procedures. They permit one laboratory worker to run tests on about 20 new compounds at one time, working only during the usual laboratory day and using only a small amount of space in the animal quarters.

Materials and Methods

Preliminary work was done to find a suitable feeding device and to ascertain what the average food consumption per mouse would be. Reports available on the use of diet methods describe food containers intended for animals caged individually, an impracticality in this case. The problem was to devise a food container which would permit using up to 15 mice per cage without a large portion of the food being wasted by spilling. After discarding several experimental feeders which proved unsatisfactory it was found that a heavy (50 grams) metal jar lid with holes punched in it set over the bottom half of a Petri plate allowed the mice to feed freely and kept the amount of food wasted to a small minimum. The lid has an inside diameter of 98 mm. and the depth is 15 mm. The holes are oval (9 x 13 mm.) and there are about 27 of them per lid. The outside diameter of the glass portion is 94 mm. and its depth is equal to that of the metal cover, giving a flush bottom surface when assembled.

It was found that if 60 grams of Purina dog chow was put in the feeder and given to 15 mice in a single cage for twenty-four hours, they consumed an average of 3.4 grams per mouse per day including the small amount spilled. This ration was found to be satisfactory by Bieter and co-workers[2] and Litchfield and associates.[3] In this case also it proved adequate in maintaining the weight of the mice. Subsequent experiments and calculations were all based on the assumption that the average daily food consumption of a mouse weighing 20 grams would be 3.4 grams. This figure is in fair agreement with that reported by Raiziss, Severac and Moetsch[4] who worked in another laboratory and used a different food container.

Determination of Toxicity

The compound to be tested is thoroughly mixed with a small amount of the stock diet by grinding the two together in a mortar. The homogeneous product is then mixed with the rest of the ration by rotation and shaking in a large square metal can. The concentrations employed are such that the animals should get total daily doses equal to the previously determined, single, oral $L.D._{50}$ and $L.D._{50}$ X 2. To save calculating the per cent drug to give the desired doses for each experiment a table has been drawn up which covers the usual doses. Thus the per cent compound for any dose can be found by adding doses if necessary (See Table 1). Usually five mice are put on each of the two doses mentioned and feeding of the test diet is continued for three days. Although dosages are calculated on the basis of a 20 gram mouse consuming 3.4 grams of test diet per day, it seemed advisable to make 4 grams per day per mouse available in the feeder. Hence, 60 grams of experimental ration is placed in a cage containing 5 mice at the start of the three-day period.

If the test compound is noxious to mice they will not eat as much as 3.4 grams in a day, so it is necessary to determine daily consumption by weighing in order to see how nearly the animals come to the calculated dose. Another table has been prepared to save calculating the per cent of theoretical dose actually consumed in each experiment (See Table 2). To illustrate the use of this table: if 5 mice consumed 10 grams of test ration they then actually received 59 per cent of the dose intended for the experiment.

TABLE 1. *Concentration of Compound Added to Stock Diet to Provide Dose Desired.*

% Compound	0.01	0.02	0.03	0.04	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Dose mgm./kgm./day	17	34	51	68	85	170	255	340	425	510	595	680
% Compound	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Dose mgm./kgm./day	765	850	935	1020	1105	1190	1275	1360	1445	1530	1615	1700

* Studies from Eaton Laboratories, Norwich, N.Y.

[1] Dodd, M. C.: The Chemotherapeutic Properties of 5-Nitro-2-Furaldehyde Semicarbazone (Furacin), J. Pharm. Exp. Ther. 86:311, (April) 1946.

[2] Bieter, R. N., Larson, W. P., Cranston, E. M., and Levine, M.: Protective Chemotherapy of Type II Pneumococcus Infections in Mice, J. Pharm. Exp. Ther. 66:3, (May) 1939.

[3] Litchfield, J. T. Jr., White, H. J., and Marshall, E. K. Jr.: The Experimental Basis for a Method for the Quantitative Evaluation of the Effectiveness of Chemotherapeutic Agents Against Streptococcus Infection in Mice, J. Pharm. Exp. Ther. 67:437, (Dec.) 1939.

[4] Raiziss, G. W., Severac, M., and Moetsch, J. C.: Effects of Sulfapyrazine and Sulfadiazine on Mice Infected with Hemolytic Streptococcus, Pneumococcus, and Staphylococcus Aureus, J. Lab. Clin. Med. 28:1580, (Oct.) 1943.

TABLE 2. *Approximate Percentage of Calculated Dose Actually Consumed by Mice on Experimental Ration.*

NUMBER OF MICE	RATION CONSUMPTION IN GRAMS																													
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54			
15	4	8	12	16	20	24	28	32	36	39	43	47	51	55	59	63	67	71	75	78	82	86	90	94	98	102	106			
14	4.2	8.4	12.6	16.8	21	25.2	29.4	33.6	37.8	42	46.2	50.4	54.6	59	63.2	67.4	71.6	75.8	80	84.2	88.4	92.6	96.8	101	105.2	109.4	113.6			
13	4.5	9	13.5	18	22.5	27	31.5	36	40.5	45	49.5	54	59	63.5	68	72.5	77	81.5	86	90.5	95	99.5	104	108.5	113	118				
12	5	10	15	20	25	30	35	40	45	50	55	59	64	69	74	79	84	89	94	99	104	109	114	118						
11	5.4	10.8	16.2	21.6	27	32.4	37.8	43.2	48.6	54	59	64.4	69.8	75.2	80.6	86	91.4	96.8	102.2	107.6	113	118								
10	6	12	18	24	29	35	41	47	53	59	65	71	77	83	88	94	100	106	112	118										
9	6.6	13.2	19.8	26.4	33	39.6	46.2	52.8	59	65.6	72.2	78.8	85.4	92	98.6	105.2	111.8	118												
8	7.4	14.8	22.2	29.6	37	44.4	51.8	59	66.4	73.8	81.2	88.6	96	103.4	110.8	118														
7	8.5	17	25.5	34	42.5	51	59	67.5	76	84.5	93	101.5	110	118																
6	10	20	30	40	50	59	69	79	89	99	109	118																		
5	12	24	36	48	59	71	83	95	107	118																				
4	15	30	45	59	74	89	104	118																						
3	20	40	59	79	99	118																								
2	30	59	89	118																										
1	59	118																												

The animals are observed for four days after the test ration is discontinued, or one week in all. If microscopic examination of tissues for pathological changes is desired, 1 or 2 mice are sacrificed at the end of the third day of feeding and autopsy specimens of brain, bone, lung, heart, liver, spleen, kidney, stomach, and small intestine are fixed in formalin and stored in 50 per cent alcohol pending delivery to the pathologist.

Figure 1 is the form devised for recording data obtained in a diet toxicity experiment, with explanatory notations added.

Determination of Therapeutic Activity

On the basis of the results obtained in the foregoing procedure a decision is made as to the concentration of compound to be tried in diet treatment of experimental infections with various organisms. The percentage for therapeutic trial is of course lowered if toxic symptoms, deaths, or low food consumption are encountered.

Fifteen mice in a single cage are put on the experimental diet for three days after intraperitoneal injection of the infecting organisms. The drug-diet is usually offered as soon after infection as possible and food is withheld for a few hours preceding infection so that the mice will start to feed immediately. Ration consumption is checked by daily weighing. After weighing, the ration remaining after a day's feeding is replenished to provide 60 grams for the following day. This quantity is provided even if there are no longer 15 animals surviving, since there is less confusion and less trouble keeping the record straight with such a routine. The number of survivors is checked for a total time of ten days. The first few experiments showed that by this time the mortality rate was so low that it was impractical to prolong an experiment and record the infrequent deaths. They were only slightly in excess of the mortality rate encountered in the control group at the same time. A record form found useful for experimental therapy is shown in Figure 2. (See Figure 2 on page 388.) Table 1 is used for converting the dose chosen for therapy to percentage of compound in the diet. Table 2 will give the percentage of the calculated dose which is actually consumed by any number of mice up to fifteen.

Discussion

It is hoped that the foregoing may be useful as a practical guide in laboratories where it is necessary to screen a large number of substances for possible antibacterial chemotherapeutic activity. The methods are simple and require only one trained person and limited animal facilities. They have been designed only to *detect* activity *in vivo* and it must be borne in mind that more complicated methods would be required for accurate

FIGURE 1. *Record form for Drug-Diet Toxicity Experiment*

COMPOUND

No.

Name

Formula

Animal
Usually mouse

No. Animals per Cage
Usually five

RESULTS

Approximate Tolerated Daily Dose in mg./K
Decided on basis of behavior and number of deaths among animals on experiment.

EXPERIMENTAL DIET

Calculated Daily Dose in mg./K
Usually $L.D._{50}$ *or* $L.D._{50} \times 2$

% Compound
From Table I

mg. Compound/g. Food
Calculate from % compound

Duration in Days
Usually three

Grams Available per Animal per Day
Usually four

Total Cumulative Consumption in Grams in Days

1.)
2.) *Determine by daily weighing*
3.)

% of Calculated Total Dose Actually Consumed
From Table II

Cage No.

Date Started
(*1 week*
(*usually*

Date Animals Discarded

Bio. No.
(*Autopsy*
(*Record*

Bio. Date

% Compound Selected for Trial in Chemotherapeutic Diet
Decided on basis of results of this experiment.

evaluation and comparison of therapeutic properties. Routine preliminary tests on a large number of compounds of the nitrofuran series as well as a few not related to furan have demonstrated the value of these procedures in this laboratory.[5]

All experimental therapy techniques in which the test substance is added to food or drinking water have inherent advantages and limitations. Discussions of these have been fully and ably presented by Litchfield, White, and Marshall,[3] Kramer and Bunch,[6] and others and should be consulted by those not already familiar with the relative merits and shortcomings of the different methods of systemic therapy.

Summary

Simple diet methods for screening new compounds for toxicity and anti-bacterial and therapeutic activity in mice have been described. Their particular application has been indicated.

[5] Dodd: Unpublished Eaton Laboratories Report of February 27, 1944. Unpublished Eaton Laboratories Report of June 8, 1944.

[6] Kramer, S. D., and Bunch, L. D.: The Administration of Certain Chemotherapeutic Agents to Mice by Incorporation of the Chemical in the Drinking Water: An Evaluation of the Method, J. Immunology 51:15, (July) 1945.

University of Hawaii

FIGURE 2. *Record form for Drug-Diet Therapy Experiment*

COMPOUND
No.

Name

Formula

INFECTION
Organism

Culture Medium

Culture Age

Inoculum

DIET
% Compound
Determined on basis of "diet toxicity"
Calculated Dose
Dose desired
Duration
Usually three days
Amount Offered Daily
Usually 4 grams

Date Started

Cage No.

Animal
Usually mouse

Animal No.	SURVIVORS IN DAYS										Autopsy Culture
	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

DIET CONSUMPTION

Days	Grams	% of Calculated
1	*Deter-*	
2	*mined*	
3	*daily*	

) *Giving actual dose received each day—use Table II*

% Animals Surviving 1 Day

% Animals Surviving 10 Days

Average Survival Time in Days

) *Calculated from survival record above*

The Management of Prolonged Labor

F. C. SPENCER
HONOLULU

FEW if any circumstances in the practice of medicine require more determined judgment, evaluation and reevaluation of changing conditions than the management of prolonged labor. The estimation of the factors of dystocia involved, and the choice of particular forms of artificial interference, constitute the problem presented to the obstetrician, and its solution determines the competence of his work. I would like to discuss in some detail the causes and management of prolonged labor.

First of all we should define our problem. It is generally accepted that, given steady, normal uterine contractions, delivery in the primipara should be effected within eighteen hours and in the multipara within twelve hours. Then if we accept these criteria we might, for purposes of discussion, accept thirty hours of such labor without delivery as "prolonged" labor.

At once we should consider the causes of nondelivery which brings us to the problem of dystocia. Dystocia means difficult labor. The anonym is eutocia or normal labor. In normal labor a balance exists between the expulsive forces, i.e., the contractions of the uterine and abdominal musculature, and the re-resistant forces, i.e., the uterine cervix, the bony pelvis and the soft parts of the lower birth tract. This balance permits of an intermittent but progressive advance of the presenting part through a gradual preparation and dilatation of the birth tract and some molding of the presenting part, and delivery without injury to either mother or child. If this balance is disturbed, then abnormal labor prevails.

Prophylaxis

At the first visit of the patient, when pregnancy is determined measurements of the bony pelvis should be made. Of their practical value I am doubtful in most cases, but we take them anyway. Pelvic tumors, ovarian and uterine, should be noted at that time. A pelvic estimation should be made after the sixteenth week of pregnancy. In doing so an estimate of the diagonal conjugate and palpation of the contour of the pelvis should be made. If I cannot reach the promontory of the sacrum I know the diagonal conjugate is greater than 12 cm. and the pelvic inlet should be adequate for a normal size baby. Next, get an impression of the width and contour of the sacrum. Palpate the sacrospinous ligaments and if they are longer than 2 finger breadths, the sacrosciatic notch is not contracted and there should be no difficulty in the mid-posterior pelvis. Note the contour, curvature, inclination and depth of the symphysis pubis, the character of the subpubic angle and the shape of the subpubic arch. This information is of value in determining passage through the inlet and mid-pelvis. Knowledge of the mobility and angle of the coccyx is of value in anticipating outlet arrest. And last, if the closed fist can be placed between the ischial tuberosities that diameter is adequate and the possibility of outlet dystocia is lessened. During the prenatal course we should make every effort to promote the mental and physical well being of the patient. This includes assurance and direction for the proper hygiene of pregnancy. She should be seen at stated intervals of increasing frequency as term approaches. At these visits the weight and blood pressure should be taken and recorded and the urine examined. Any deviations or trends from normally expected recordings should be interpreted and remedial measures taken.

A Hillis impression should be done late in pregnancy or early in labor. This gives information of importance in that it indicates the relationship of the biparietal diameter of the head and the true conjugate of the pelvis. The successful passage of the head through the pelvic inlet depends upon the relative size of these two diameters. When the biparietal diameter has passed the true conjugate the bony resistance at the inlet has been overcome, so that on rectal or vaginal examination, if one feels that the bony part of the molded or unmolded head has reached a line drawn between the tips of the spines of the ischium, the biparietal diameter is then through the true conjugate. It is well to remember that more than 90 per cent of all serious pelvic contractions are found at the inlet. All cases in which the head cannot be impressed below the spine at the beginning of labor should be managed with a view to possible abdominal delivery.

Read before the meeting of the Honolulu Obstetrical and Gynecological Society, August 18, 1947.

Management

Eventually the patient enters the hospital in labor. If the contractions are ineffective and of a desultory type, that labor is no problem for the moment and need not be considered in this discussion. If, however, thirty hours of good labor have elapsed without delivery, there arises a problem which will tax the best clinical judgment and abilities of any obstetrician.

Even before this last circumstance arises, the case should be conducted in such a manner as to anticipate this eventuality. There should have been rest periods induced by sedation, preferably morphine if necessary. This will help prevent maternal exhaustion and secondary uterine inertia. The patient should be sustained with parenteral fluids including glucose to make good the glycogen depletion which takes place in the liver.

If the membranes have ruptured our problem is further complicated. We know that bacteria which normally inhabit the vaginal tract may become pathogenic after prolonged rupture of the membranes. Six hours after rupture of the membranes the case should be considered potentially or actually infected and sulfonamides or penicillin or both should be given prophylactically.

It is assumed that long before this time it has been determined that the presenting part has become engaged. If there had been no engagement, elective Cesarean section should have been done long before the case had reached the stage under discussion. Transperitoneal section is an unsafe procedure after twenty-four hours of labor or six to eight hours after rupture of the membranes.

Repeated and frequent check of the fetal heart should be made through all prolonged labor. This gives a very accurate estimate of the well being or distress of the fetus.

If profound exhaustion or infection of the mother manifests itself or if the rate and character of the fetal heart sounds indicate actual present danger to the child, then operative interference must be considered. If the cervix is fully dilated, and the head is at or below the spines, forceps may suffice. The Kielland forceps is the instrument of choice in deep transverse arrest. If the cervix is not fully dilated and the head is not at or below the spines, extraperitoneal section, either of the supra vesical or para vesical type, according to the preference of the surgeon, should be done.

X-ray pelvic estimation should have been done. Roentgenograms are of particular value when done near term or during labor, as cephalopelvic relations will be better shown then. However, X-rays are to be accepted as any other laboratory procedure—to be interpreted at the bedside.

Of the several obstructions to the easy passage of the fetus which the expulsive forces of labor must overcome, attention is frequently concentrated upon the cervix and the pelvic floor. Cosgrove does not consider "cervical dystocia" a cause for prolongation or obstruction of labor unless the cervix is grossly diseased, as by new growth or extensive cicatrization. He feels that if coexisting factors of dystocia are overcome the cervix will dilate readily. Trachelotomy, Duhrssen's incisions and manual dilatation of the cervix are seldom practiced at the Margaret Hague Maternity Hospital. Rigidity of the pelvic floor should not be a factor in prolonged labor. That is easily overcome with a pair of scissors.

In prolonged labor of an obstructive type, at times the uterus will go into tetanic contractions and not relax at regular intervals. This offers a real danger of rupture of the uterus and no intrauterine manipulations, such as version, should be done while the uterus is in such a state. As a rule tetanic contractions can be overcome with anesthesia and then something should be done to effect delivery, because fetal and maternal risks are very high.

In every labor there is a thinning out of the lower uterine segment: this is physiological. In obstructed labor there may be an exaggeration of this condition; the lower uterine segment continues to thin out and lengthen; the upper segments become shortened and thickened, and there is a contraction ring between the two segments which can be palpated and often seen by observing the abdomen. This is the so called Bandl's ring, and is not a cause of dystocia but rather is caused by dystocia. Such a condition is dangerous to both mother and child. This is a definite precursor of uterine rupture. Delivery should be effected before that eventuality happens.

If after a normal period of time with good labor there is no delivery, a vaginal examination under delivery room technique should be done, preferably under anesthesia. At that time the size, presentation, position and other characteristics of the fetus should be determined and the maternal pelvis reevaluated. Usually there is no one problem which will determine future conduct of the labor, but rather the correlation of the several circumstances found. There is no set rule to follow, each case is a rule unto itself and is resolved by the obstetrician's experience, judgment and abilities.

Regional nerve block, especially caudal analgesia, can be of great value in the management of

prolonged labor. Much maternal distress can be relieved over a long period of time without danger to mother or baby. With its use the cervix is relaxed and dilates more easily; there is relief, both mental and physical, through the long first stage; vaginal examination can be done at any time without resort to inhalation anesthesia; and forceps delivery or Cesarean section can be done if indicated. And last but not least there is less blood loss post partum and no narcotization of the baby as is frequently seen in such cases where analgesics, narcotics and inhalation anesthetics have been used.

Each obstetrician should conduct labor according to his abilities and anticipate eventualities that may arise. Support the patient psychologically and physiologically; reassurance and periods of rest are indispensable. Use sulfonamides or penicillin or both in potential or actual infection. Have blood available, as post-partum hemorrhage is most likely to occur in these cases where the maternal organism is exhausted. If only the vaginal route is to be considered for delivery, remember that a higher fetal mortality must be accepted as well as risk of greater maternal injury. If only the transperitoneal Cesarean section is to be ultimately considered, remember that it should be done within twenty-four hours of the onset of labor, and within six to eight hours after rupture of the membranes; after that the possibility of infection and peritonitis increases tremendously. If extraperitoneal section is available, it is safe to wait a little longer to determine the possibility of vaginal delivery.

In the preparation of this paper I have made liberal use of material and experiences at the Margaret Hague Maternity Hospital and the course in Obstetric Analgesia under Dr. R. A. Hingson, University of Tennessee, Memphis, Tennessee.

Young Building

ATTENTION

Those who plan on attending the Fourth Congress of the Pan-Pacific Surgical Association, which will be held in Honolulu August 30 to September 13, 1948, should make their hotel reservations immediately. For further information, write:

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Suite 7, Young Hotel Building
Honolulu 9, T. H.

Evaluation of Labyrinthine Function in the Diagnosis of Brain Tumor

Preliminary Report Based on Analysis of 64 Cases

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THIS study is based on an analysis of approximately 700 cases of suspected brain tumor admitted to the neurological and neurosurgical services of the Graduate Hospital of the University of Pennsylvania from 1933 to 1942, inclusive. Of these approximately 700 cases of brain tumor suspects, in only 76 cases were the diagnoses substantiated by operative or post-mortem evidence, or both. Cases without operative or post-mortem proof were automatically eliminated from this study. This number was further reduced to 64 cases because in 12 cases the labyrinthine studies were incomplete.

For convenient reference, the accompanying table shows the cases, arbitrarily numbered from 1 to 64, with each operative, pathological or post-mortem, and vestibular diagnosis. It will be seen that in cases 1 to 47, inclusive, or 73.4 per cent, the vestibular tests were consistent with the presence of an intracranial lesion. In cases 1 to 40, inclusive, or 62.5 per cent, the vestibular tests correctly lateralized the lesion and correctly localized it in respect to the tentorium. In cases 41 to 47, inclusive, or 10.9 per cent, the vestibular tests, although pointing to an intracranial lesion, were wrong in respect to localization or lateralization or both. In 17 cases (48 to 64, inclusive), or 25.7 per cent, the vestibular tests failed to reveal the presence of an intracranial lesion, or were inconclusive.

It is expected that some of the errors in cases 41 to 47, inclusive, will be resolved on re-examination. Typographical or transcription errors, or both, are suspected in some of these. Not even the most ardent proponents of the vestibular tests in the diagnosis of intracranial lesions expect the tests to correctly localize the lesion in every case, and since cases 41 to 47 do confirm the presence of an intracranial lesion, they can be justifiably included in this study. This study is concerned only with the evaluation of functional labyrinthine tests in disclosing the presence of an intracranial lesion, and does not propose to consider their accuracy in respect to localization. In a subsequent report it is intended to show in what types of intracranial lesion the vestibular tests are most useful, and to attempt to analyze why they are wrong or misleading in others.

No clinical test or laboratory procedure is invariably correct 100 per cent of the time, nor is it expected to be. Any clinical test which in 73.4 per cent of the cases provides definite clinical help in arriving at what is often a very difficult diagnosis is a valuable clinical procedure. Any test, clinical or laboratory, reflects the fallibility of the examiner and is limited by his skill, experience, and judgment. The labyrinthine tests in this series were done by the otological service of Dr. George M. Coates of the Graduate Hospital under the direction of Dr. Benjamin H. Shuster and his staff. Dr. Shuster, who is a recognized authority on neuro-otology, interpreted the labyrinthine tests in every case and in most cases performed the actual tests personally. The tests in these cases, therefore, can be considered authoritative. In less competent hands, I doubt that the labyrinthine tests would provide such a high degree of accuracy.

Summary

1. Sixty-four cases of brain tumor are presented in which the diagnosis has been confirmed by operation or post-mortem evidence or both, and in which reliable functional labyrinthine tests are available.

2. In 47 cases, or 73.4 per cent, the labyrinthine tests confirmed the presence of an intracranial lesion.

Received for publication November 7, 1947.

This study, originally started in 1943 and interrupted by military service, was undertaken at the request of the faculty of otolaryngology of the Graduate School of Medicine of the University of Pennsylvania and has been approved in principle as a worthy thesis for the Degree of Doctor of Science in Medicine.

3. In 40 cases, or 62.5 per cent, the labyrinthine tests correctly lateralized the lesion and correctly localized it in relation to the tentorium.

4. In 7 cases, or 10.9 per cent, the labyrinthine tests confirmed the presence of an intracranial lesion, but were wrong in respect to localization.

5. In 17 cases, or 25.7 per cent, the labyrinthine tests were wrong or inconclusive.

Conclusion

Functional labyrinthine tests can be depended upon to furnish valuable evidence in the diagnosis of intracranial lesions, and in competent hands are capable of a high degree of accuracy.

In every suspected case of brain tumor, or brain abscess, the labyrinthine reactions should be studied by a competent observer.

King Kalakaua Building

CASE NO.	OPERATIVE DIAGNOSIS	PATHOLOGICAL DIAGNOSIS	POST-MORTEM DIAGNOSIS	VESTIBULAR DIAGNOSIS
1	Cholesteatoma, left cerebellum	Cholesteatoma	None	Left cerebello-pontine angle lesion
2	Acoustic neuroma, left 8th nerve	Periacoustic fibroblastoma	None	Posterior fossa lesion, mostly left cerebellum
3	Intraventricular tumor	Ependymoma of choroid papilloma	None	Lesion on midline near junction of cerebella peduncles
4	Posterior fossa tumor	None	None	Suspicious posterior fossa lesion, left side
5	Left cerebello-pontine angle tumor	None	None	Cerebello-pontine angle tumor, left
6	Cystic glioma, left frontal temporal lobe	Astrocytoma	None	Midline supra-tentorial lesion
7	Subcortical glioma, left temporal lobe	Astrocytoma	None	Suspicious supra-tentorial lesion, left side
8	Tumor, tip of right frontal lobe	None	None	Suspicious supra-tentorial lesion, probably midline
9	Intraventricular tumor (not exposed)	None	None	Suspicious supra-tentorial lesion, probably midline
10	Tumor of 4th ventricle	Fibrous astro-cytoma of quadri-geminal place and optic thalamaus	Brain tumor	Midline supra-tentorial lesion
11	Left temporal glioma	None	None	Midline supra-tentorial lesion inclined to left
12	Cerebellar tumor, left	Astrocytoma	None	Midline posterior fossa lesion
13	Cerebellar tumor, left	Questionable sar-comatosis of men-inges with encroachment of cerebellum	None	Midline posterior fossa lesion
14	Abscess, left frontal lobe	Brain abscess	None	Intracranial lesion, left, supratentorial
15	Sphenoidal ridge tumor, left	Meningioma	None	Suspicious tentorial lesion, left
16	Tumor, right temporal lobe	None	None	Probably supratentorial lesion, midline
17	Temporo-parietal cystic glioma, right	None	None	Suspicious midline supratentorial lesion
18	Cerebello-pontine angle tumor, right	None	None	Cerebello-pontine angle lesion, right
19	Tumor of 4th ventricle	Protoplasmatic fibrillary astrocytoma	None	Midline posterior fossa lesion
20	Midline cerebellar tumor	Medulloblastoma	None	Midline posterior fossa tumor

CASE NO.	OPERATIVE DIAGNOSIS	PATHOLOGICAL DIAGNOSIS	POST-MORTEM DIAGNOSIS	VESTIBULAR DIAGNOSIS
21	Cerebello-pontine angle tumor, right	Not available	None	Cerebello-pontine angle lesion, right
22	Midline cerebellar tumor	None	Cerebellar tumor projecting into 4th ventricle and internal hydrocephalus	Intracranial lesion in posterior fossa in midline, inclined to right
23	Cerebello-pontine angle tumor, right	Acoustic neuroma	None	Cerebello-pontine angle lesion, right
24	Midline cerebellar tumor, left	None	None	Posterior fossa lesion, midline
25	Questionable deep seated frontal lobe tumor	None	Astrocytoma	Intracranial lesion, supratentorial, probably well forward, right
26	Small tumor, right internal acoustic meatus	Periacoustic fibroblastoma	None	Cerebello-pontine angle lesion, right
27	Tumor of right pontine angle	Acoustic neuroma	None	Possible cerebello-pontine angle lesion, right
28	Midline intra-ventricular tumor	None	None	Suspicious supratentorial lesion, probably midline
29	Tumor, left cerebello-pontine angle region	None	None	Posterior fossa lesion, probably left cerebellar lobe implicating pons
30	Cerebellar tumor, midline	Medulloblastoma	None	Posterior fossa midline lesion
31	Meningioma, left cerebellar pontine angle	Meningioma	None	Cerebello-pontine angle lesion, left
32	Tumor of right cerebello-pontine angle	None	None	Cerebellar lesion encroaching on right cerebello-pontine angle
33	Cerebello-pontine angle tumor, left	Perineuro-fibroblastoma of 8th nerve	Cerebello-pontine angle tumor, left	Cerebello-pontine angle lesion, left
34	Large midline tumor in cerebellum extending into the cord	Not available	Not available	Suspicious posterior fossa tumor
35	Large meningioma arising from dura and falx, involving left parietal occipital region	Meningioma	None	Central lesion near midline supratentorial
36	Frontal lobe glioma, right	Glioblastoma, multiforme	None	Suspicious supratentorial lesion, right
37	Cystic collection of fluid in irght cerebello-pontine angle with old blood clot	Blood clot	None	Cerebello-pontine angle lesion, right
38	Fronto-parietal abscess, right	Brain abscess	None	Supratentorial lesion, right
39	Tumor, left temporal lobe	Astrocytoma	None	Midline intracranial lesion supratentorial probably on left
40	Cystic pontine glioma on floor of 4th ventricle	Protoplasmatic astrocytoma	None	Mass lesion, midline, posterior fossa
41	Cerebellar tumor, left	Astrocytoma	None	Right sided posterior fossa lesion near midline
42	Tumor of left cerebellum	No tumor	None	Left supratentorial lesion
43	Deep seated infiltrating tumor encountered at a depth of 2 cm. through a transcortical incision	None	None	Intracranial lesion, right temporal lobe

CASE NO.	OPERATIVE DIAGNOSIS	PATHOLOGICAL DIAGNOSIS	POST-MORTEM DIAGNOSIS	VESTIBULAR DIAGNOSIS
44	Tumor of right cerebello-pontine angle	Acoustic neuroma	None	Cerebello-pontine angle tumor, left side
45	Right occipital lobe tumor	Spongioblastoma, multiforme	Recurrent brain tumor	Left cerebellar lesion
46	Cerebello-pontine angle tumor, left	Meningioma	None	Posterior fossa lesion, right side
47	Metastatic lesion in left cerebellar lobe	Believe to be metastatic adenocarcinoma from breast	None	Suspicious supratentorial lesion, right side
48	Sub-cortical tumor near midline beneath left parieto-occipital lobes extending into basal ganglia and corpus callosum	Oligodendroblastoma	Tumor, left parietal lobe, involving cerebellar and cerebral penduncles	The only suggestive thing about degenerative disease is the quick nystagmus movement upon rotation; otherwise practically normal responses. No evidence of intracranial lesion
49	Glioma, 3rd ventricle	Oligodendroglioma	None	No intracranial lesion. There is an old standing degeneration with deafness in left ear. No other abnormality noted
50	Tumor of 4th ventricle	Fibrillary astrocytoma	None	No evidence of intracranial lesion. Posterior fossa most possible if one does exist
51	Tumor of left greater sphenoid ridge	Angioblastic meningioma	None	No evidence of intracranial lesion. Posterior fossa excluded because of sensitivity
52	Glioma, left occipital lobe	Undifferentiated tumor possibly in region of pineal body	None	No vestibular evidence of intracranial lesion. The caloric response really indicate a slight hyperirritability with no diagnostic significance
53	Tumor beneath ependyma, left lateral ventricle	Protoplasmic astrocytoma	None	All reactions within normal limits
54	None	Protoplasmatic astrocytoma	No gross description available	Normal responses to caloric tests. No other tests could be made because patient could not cooperate. No evidence of intracranial complication
55	Tumor, left temporal lobe	Protoplasmatic astrocytoma	None	No evidence of intracranial lesion
56	Glioblastoma, right fronto-parietal region	Mixed glioblastoma and astrocytoma	None	No evidence of any mass intracranial lesion
57	Tumor in right frontal area	Mixed neurospongioblastoma, vascular	None	No evidence of intracranial complication. Posterior fossa eliminated because of sensitivity
58	Malignant tumor, left fronto-temporal area	Spongioblastoma, multiforme	None	No evidence of intracranial lesion
59	Subcortical glioma, left parietal temporal region	Astrocytoma	None	Tests do not deviate from normal enough to indicate a diagnosis. If lesion is present it would be in posterior fossa
60	Pituitary adenoma	Adenoma	None	No abnormal responses
61	Glioma, right frontal lobe	Glioma	None	No abnormal findings. Patient was unable to stand for complete test
62	Midline cerebellar tumor	emangioma	None	No definite evidence of intracranial lesion. Vestibular examinations of this patient at the Mt. Sinai Hospital, New York, indicated a right cerebellar lesion
63	Cerebellar medulloblastoma in region of 4th ventricle	Medulloblastoma	None	Vestibular findings negative
64	Tumor of 4th ventricle	Medulloblastoma	None	No definite evidence of intracranial lesion. If present, probably in posterior fossa



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THE HAWAII MEDICAL JOURNAL

P. S.: PAGE 442 LISTS THIS MONTH'S ADVERTISERS.

Hawaii
MEDICAL JOURNAL
OFFICIAL PUBLICATION OF THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

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[EDITORIALS]

THE HAWAII HEART ASSOCIATION INCORPORATED

All physicians in the Territory will soon be receiving the announcement of the formation of The Hawaii Heart Association Incorporated. There may be a natural reaction of antagonism to this, such as, "What! another society? Another demand for money and time?" However, it must be realized that heart disease is the leading cause of death in the United States and that The American Heart Association for the past five years has been doing all it can to stimulate the formation of local heart societies in order to interest the public and get its support for more study and research regarding the basic cause of arteriosclerosis and interest in other types of heart disease.

The public, largely because they are uninformed regarding facts about heart disease, give a tremendous amount of over-emphasis to certain symptoms, such as pain in the left side of the chest or palpitation, whereas some of the more serious symptoms are overlooked. Interest in rheumatic heart disease in the Territory is increasing and information should be made available to the public regarding the development of this disease in children. It has been amply stated that the greater the need, the less the public support. For instance, in 1946, there was available for 175,000 patients with poliomyelitis $98 per patient which had been raised by public contribution. For over 3,000,000 patients with cardiac disease, there was less than *three cents* raised per patient. The Hawaii Heart Association Incorporated plans to have a large membership, both medical and non-medical, with annual dues of $1 per person. The American Heart Association, whose headquarters are in New York, has welcomed the formation of our local association and at the annual meeting this June, it is hoped that it will be recognized as a distinct branch of The American Heart Association, with, however, independent status as regards funds.

So when you get your letter asking you to become a member of The Hawaii Heart Association Incorporated, please at least think it over before you consign the correspondence to the wastebasket —better yet, file the letter and kokua!

ALFRED S. HARTWELL, M.D.

LEPROSY IN BRAZIL

A recent report from Brazil offers much interesting information regarding the leprosy problem in that country. The material on which it is based is abundant, indeed: 38,606 known cases in the 25-year period ending in 1945, a per capita incidence, over this entire period, about half that in Hawaii during the past decade. It is of particular interest that the disease in Brazil is still about 3 times as common among the foreign-born, in proportion to their numbers, as in native Brazilians, and that the former manifest nearly 3 times the ratio of tuberculoid to lepromatous involvement found in the latter group. Even the most favorable groups, however, show only a ratio of 2 lepromatous cases to 1 tuberculoid, not nearly as satisfactory as Hawaii's ratio of almost 1:1.

Connubial infection has been proven (or strongly suspected?) in 14% of one series of nearly 2,000 cases from Sao Paulo, and infection of mothers and fathers by their children is observed twice as often as the reverse phenomenon. Both of these occurrences are regarded as decidedly rare in Hawaii.

It is amusing to note that the new "category" of leprosy advocated by the South American students of leprosy, namely, the "incaracteristico" or uncharacteristic group, has had its name translated in this article as "incharacteristic".

Leprosy is beginning to decline in Brazil, but the decline is not nearly as well advanced as it is in Hawaii. It will be interesting to see, in another five or ten years, what effect sulfone or other treatment will have had on the rate of the decline.

THE HAWAII CANCER SOCIETY, INC. AND ITS RELATION TO THE MEDICAL PROFESSION

By this time the medical profession is aware of the formation of the Hawaii Cancer Society, Inc. by a local group of laymen and physicians. That Hawaii has needed it has been obvious for some time and now that we have it, it should be the solemn duty of each practicing physician to support it and its policies to the end that we will all do a better job of cancer control with each passing day.

It is planned to carry out an extensive educational program both for the laity and for physicians, the means for doing each being markedly different, of course. In the case of the former there is the feeling on the part of some members of the medical profession that the public has already been scared too much by the word cancer and its implications. Cancer-phobia is certainly a rather frequent complaint in our daily practice. However none of us has had to sign a death certificate with cancer-phobia as the cause of death! Would that we could say the same for cancer. It cannot be denied that the more sound and useful information the public has on cancer, the earlier the individual patient will come in for treatment and diagnosis. This can be done by a constant, well-balanced educational program through the press, radio, journals, clubs, schools and pamphlets—to mention some of the ways.

In the matter of medical education, money will be provided for refresher courses for physicians, which should prove valuable to us here in Hawaii. The Executive Committee of the Society has already ordered a series of booklets on practical knowledge of cancer for practicing physicians which will be sent to each physician in the Territory as well as hospital libraries, nursing instructors and others. These booklets have been found very valuable in Illinois where they were prepared and whose Medical Society is offering them to us at cost.

The campaign for fund-raising will be conducted through the month of May and it is hoped that sufficient money will be raised to carry out a first-class cancer program. This campaign is receiving the whole-hearted support of every group which has been approached on the matter and should literally "go over the top." It is not intended to duplicate any existing service with funds from this campaign, but rather to broaden the whole base for cancer control so that in time definite results will be noted.

Specific projects for offering service to the public have been already selected, but the exact means and time for them are still being studied. One project is the establishment of a cancer information center at the Society headquarters "Cancer Cottage," 1136 Punchbowl Street, Honolulu, with the telephone number 52323. The office at this location will be under the supervision of a lay executive secretary who, in the case of individuals seeking medical help, will refer them to proper sources as designated and approved by the Medical Society. In the case of the outer Islands no definite plan has been adopted, but whatever is done will be done at the direction of the local Medical Society in cooperation with the Hawaii Cancer Society. Plans will be made to establish cancer clinics for the detection of cases. This is one of the very important angles to progress in cancer control. Much is being done elsewhere in this line—a clinic in Philadelphia is successful in detecting early and unsuspected cases of female genitalia carcinoma. In New York City, mass x-rays of the stomach have uncovered very early, curable cancer of the stomach. How our program will operate is not certain at this time, but the field is open for an intensive, coordinated activity to help the cause.

We all pray for the day when continued research will find the answer to the cause of cancer and with it a better means of treatment than now exists. All cases of cancer cannot be cured even when seen early. We do know that early cancer is curable in a much higher percentage of cases than can be accomplished in the late stages. It is extremely important for each of us to do his part in detecting more cases early.

Following the educational campaign there will be many patients consulting physicians in regard to one of the "danger signals" which will be so prominently publicized. The seven "danger signals" to be used are as follows: 1—Any sore that does not heal, especially one about the tongue, or lip of the mouth. 2—A painless lump or thickening in the breast, lip or tongue. 3—Any irregular bleeding from the nipple or any natural body opening. 4—A progressive change in color or size of a wart, mole or birthmark. 5—Persistent

indigestion. 6—Persistent hoarseness, unexplained cough or difficulty in swallowing. 7—A change of normal bowel habits.

The family physician is the first person from whom patients will seek advice both for diagnosis and for reassurance. No one enjoys more respect and more responsibility than the family doctor. The physical examination by him and the advice given may detect or miss the early case of cancer. It would seem prudent to recommend that a complete, thorough physical examination should be done, followed by sound advice based on the findings. This advice should include the ready use of the x-ray for detecting lesions, particularly of the stomach or colon, and these x-rays are most likely to find early lesions when made by trained radiologists; the use of the proctoscope in every case of rectal bleeding; appropriate tests for abnormal vaginal findings (it is to be noted that local pathologists have stated their willingness to perform microscopic examinations of tissues free of charge for any patient who is unable to pay). These are but a few methods which might be used to follow up any suspicious findings. There are many others and all appropriate ones should be used even on the slightest indication.

It is sincerely hoped that the seriousness of the cancer problem here in Hawaii is appreciated by all and that any new opportunities offered by the Hawaii Cancer Society, Inc. for cooperation in the control of this terrible disease will not be wasted.

L. M. W.

BCG VACCINATION

Statement of the Present Policy of the American Trudeau Society, Medical Section of the National Tuberculosis Association

The members of the Society and other physicians in the United States have been interested for many years in the active immunization against tuberculosis with BCG. The expansion of public health activities in the field of tuberculosis control by official and voluntary agencies and the acquisition of new knowledge concerning immunity in tuberculosis have prompted the American Trudeau Society to make the following observations and recommendations:

I. BCG vaccine, prepared under ideal conditions and administered to tuberculin negative persons by approved techniques, can be considered harmless.

II. The degree of protection reported following vaccination is by no means complete nor is the duration of induced relative immunity permanent or predictable. The need for further basic research on the problem of artificial immunization against tuberculosis is recognized and is to be emphasized. Studies should be directed: (a) toward the improvement of the immunizing agent, (b) to the development of criteria for vaccination and re-vaccination and (c) to determine more accurately which groups in the general population should be vaccinated. Several well controlled studies are under way at the present time and it is expected that others will begin within the near future.

III. On the basis of studies reported in the European and American literature, an appreciable reduction in the incidence of clinical tuberculosis may be anticipated when certain groups of people who are likely to develop tuberculosis because of unusual exposure, inferior resistance, or both, are vaccinated.

A. In the light of present knowledge vaccination of the following more vulnerable groups of individuals is recommended provided they do not react to adequate tuberculin tests.

1. Doctors, medical students and nurses who are exposed to infectious tuberculosis.
2. All hospital and laboratory personnel whose work exposes them to contact with the bacillus of tuberculosis.
3. Individuals who are unavoidably exposed to infectious tuberculosis in the home.
4. Patients and employees of mental hospitals, prisons and other custodial institutions in whom the incidence of tuberculosis is known to be high.
5. Children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high.

B. Vaccination of the general population is *not* recommended at this time except for carefully controlled investigative programs, which, as a rule, will be best carried out under the auspices of official agencies such as the U. S. Public Health Service, state and municipal health departments and other especially qualified groups.

Report submitted to the ATS Executive Committee at its meeting in Chicago January 22, 1948, by Dr. H. McLeod Riggins, New York, N.Y., chairman of the Chemotherapy Committee, and adopted by the Executive Committee.

IV. BCG vaccine should not be made available for general distribution in the United States at this time because: (a) the most effective strain of BCG has not been agreed upon nor has fully satisfactory standardization of the vaccine been achieved, (b) the best qualified experts have not agreed as to the most effective method of vaccination and (c) fully satisfactory arrangements have not been perfected for transportation and storage of the vaccine.

The vaccine should be prepared only in accredited laboratories especially devoted to this task, in which virulent tubercle bacilli are not cultivated or handled and in which all other possible precautions are exercised to assure safety and quality of the product.

Adequate record systems should be devised for management of the statistical problems involved in recording and following large numbers of vaccinated people. These and other problems of particular importance are now being studied on an extensive scale by official and voluntary agencies in the United States and in close collaboration with European scientists experienced in this field.

V. The Society believes that since BCG vaccination affords only incomplete rather than absolute protection, the most effective methods of controlling tuberculosis in the general population are (a) further improvement of living conditions and the general health, (b) reduction of tuberculous infection, which can be accomplished by modern public health methods and the unremitting search among presumably healthy individuals for patients with infectious tuberculosis, (c) prompt and adequate medical and surgical treatment of patients with active disease, (d) segregation and custodial care of those not amenable to accepted forms of therapy and (e) adequate rehabilitation.

Fortunately, great advances have been achieved during recent years in the development of diagnostic methods applicable on a mass scale and there have been significant improvements in the surgical and medical treatment of tuberculosis. The expansion of modern diagnostic, therapeutic and rehabilitation facilities is required at this time to make full use of these new methods which can accomplish further dramatic reduction of tuberculosis mortality and morbidity rates in the United States.

"It is to be emphasized that BCG vaccination must not be regarded as a substitute for approved hygienic measures or for public health practices designed to prevent or minimize tuberculous infection and disease. Vaccination should be regarded as only one of many procedures to be used in tuberculosis control. Vaccination seems unwarranted: (a) in areas in which the tuberculosis mortality rate is extremely low and (b) in localities in which the tuberculin test is of especial value as a differential diagnostic procedure."

OLD AGE STUDY

What of the problem of old age in Hawaii?

Medical science, through long research, has given man more years to live. Year by year, as the span of life is lengthened, there are more of the chronically ill, the frail and the helpless, but there are also those who are alert, active and well able to take care of themselves.

Years after 60 can be not merely years of survival but good years. Advancing years do not create in all persons a similar state of mind or the same curtailment of capacities.

The problems of life over 60 arise more often from the common problems of living than from old age itself and are the same as those confronting people at earlier ages: financial need, illness, family conflicts, personality difficulties, inappropriate housing, lack of recreational and occupational outlets. Our senior citizens over 60 should be able to lead normal and active lives within their functional capacity. They need, as urgently as at other ages, companionship, comfort, independence, occupation and entertainment.

It is true that physiological and psychological changes peculiar to late life affect individual adjustment and that dealing with these problems calls for adaptation and extension of community resources. We have an obligation to our older folks to develop programs and create opportunity to add more life to the years over sixty and to make available better care as it is needed.

Not very much attention has been given heretofore to the problem created by the increasing number of old people in the population in Hawaii. The Legislature drew attention to it last session. It requested the Department of Public Welfare to make a study of the needs of the aging population and to report back in 1949.

The D.P.W., through its current study, hopes to inventory the services and facilities and obtain an indication of inadequacies for meeting the needs of the aged. It is to the physicians and nurses, as well as to the social workers, community agencies and institutions that the D.P.W. looks for information, and it is from these same groups that leadership in the community must come for a correction of the inadequacies that exist.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The annual meeting of the Hawaii County Medical Society was called to order by President Dr. S. Mizuire at 8:00 p.m., March 13, 1948 at Fernhaven.

Those present were Drs. Bernstein, M. L. Chang, M. H. Chang, Phillip Chock, W. T. Chock, H. Crawford, L. Fernandez, R. Fillmore, R. Hata, S. Kasamoto, H. Kurashige, T. Kutsunai, W. Loo, S. Mizuire, H. Okada, A. Orenstein, T. Oto, C. L. Phillips, L. L. Sexton, H. Sexton, E. Slaten, G. Tomoguchi, T. Woo, H. Yuen, D. Depp, R. Miyamoto, and B. Cunningham. Guests included Drs. Lynn and Jim and Mr. Flath.

An announcement of the arrival of the Honolulu Blood Bank team on March 20, 1948 was made and doctors were urged to notify patients of the opportunity to replace blood used.

The report of the Library Committee was made by Dr. H. Crawford. The report included a request for $600.00 for the next year. This request was unanimously passed by vote on motion by Dr. M. L. Chang seconded by Dr. E. Slaten.

The Treasurer's report was read by Dr. Tomoguchi and accepted.

Dr. Leo Bernstein read the report of the committee appointed to take up the matter of the Mental Hygiene Fund. On motion of Dr. L. L. Sexton seconded by Dr. H. Yuen, the recommendations were accepted by vote. A Mental Hygiene Fund will be established.

Correspondence concerning cancer research was read from Dr. Batten. Dr. A. Orenstein made a motion that this Society go on record as approving of the research project and that the doctors cooperate with the study. Motion seconded by Dr. W. Loo and passed unanimously by vote.

It was announced that twenty-four members of this Society had signed their willingness to join the American Association of Physicians and Surgeons; also that application blanks are now on hand with the Secretary for all those that want them.

A secret vote on the application of Dr. Jim was taken. A unanimous vote was cast for his admission. A secret vote on the application of Dr. W. Leslie was taken. The result was three no and twenty-one yes.

Mr. Flath, administrator of The Queen's Hospital, was introduced. He is in Hilo to look over the Hilo Hospital at the request of the Managing Committee of the Hilo Hospital and make recommendation for its improvement. Mr. Flath outlined his intended survey but as yet could not give any definite information as to his findings.

Dr. Crawford, councillor, was asked to bring up the subject of the American Association of Physicians and Surgeons at the next meeting of the Council.

On motion by Dr. A. Orenstein, seconded by Dr. L. L. Sexton the following men were elected to office. These men had been recommended by the Nominating Committee. Drs. L. Fernandez, president; H. M. Sexton, vice-president; Leo Bernstein, secretary; and S. Haraguchi, treasurer.

A rising vote of thanks to the past president, Dr. S. Mizuire, was given for his very excellent work during the past year.

There being no further business the meeting was adjourned at 9:30 p.m.

HAROLD M. SEXTON, M.D.
Secretary

* * *

A special meeting of the Hawaii County Medical Society was held at the auditorium of the Hilo Intermediate School on March 19, 1948. The Hawaii County Dental Society was invited to attend this meeting. The meeting was called to order at 7:40 p.m. by the President, Dr. L. Fernandez. The members present were: Drs. Leo Bernstein, C. B. Brown, S. R. Brown, M. L. Chang, P. Chock, W. T. Chock, H. E. Crawford, E. B. Cunningham, D. Depp, L. Fernandez, R. S. Fillmore, S. Haraguchi, R. Hata, S. Kasamoto, Z. Matayoshi, J. Matsumura, R. Miyamoto, S. Mizuire, T. Oto, C. L. Phillips, H. M. Sexton, W. Seymour, G. Tomoguchi, F. Wong, T. Woo, H. Yuen, and guests: Drs. F. J. Pinkerton, Steele Stewart, and Mr. C. Flath and Mr. C. Kiltz. Dentists present were: Drs. C. A. Goo, C. F. Tang, H. Nishimura, and T. Yoshina. The President extended a message of welcome to the Dental Society.

The first matter of business was the election of two delegates and two alternates. On motion of Dr. C. Phillips a unanimous ballot was cast for Drs. D. Depp and W. Seymour as delegates. Seconded by W. Chock and carried. On motion of Dr. H. Sexton a unanimous ballot was cast for Drs. C. Phillips and R. Fillmore as alternates, seconded by Dr. W. Loo and carried.

The President introduced Dr. F. J. Pinkerton who discussed the program of the Medical Economics Committee. Dr. Pinkerton gave a detailed account of the organization, administration, activities and problems of the Medical Economics Committee since its inception.

Mr. C. Flath then presented a discussion on the H.M.S.A. He stated that the H.M.S.A. plan needs immediate revision. A new plan will be submitted, having as its philosophy—service to the patient. This plan is to be supported by the hospital and needs full support by the physician.

Dr. Steele Stewart discussed the new fee schedule which was being developed. There will be a single fee schedule for all contractual operations.

The need for the formation of a Disaster Council was then presented by the President. Dr. R. Fillmore moved that a special meeting be called at 7:30 p.m., March 23, 1948, at the staff room of the Hilo Memorial Hospital to consider this matter. Seconded by Dr. H. Sexton and carried.

The meeting was adjourned at 11:30 p.m.

* * *

A special meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on March 23, 1948. The meeting was called to order at 7:40 p.m. by the President, Dr. L. Fernandez. The members present were: Drs. Leo Bernstein, C. B. Brown, S. R. Brown, C. Carter, M. H. Chang, M. L. Chang, W. T. Chock, H. E. Crawford, L. Fernandez, S. Kasamoto, W. Loo, R. Miyamoto, S. Mizuire,

A. Orenstein, T. Oto, C. L. Phillips, H. M. Sexton, L. L. Sexton, E. F. Slaten, G. Tomoguchi, H. Yuen, V. Jim, W. Leslie, and guest: Dr. E. J. Teagarden.

The President presented for further consideration by the Society the communication of Dr. Grover A. Batten, Chairman, Cancer Committee, Hawaii Territorial Medical Association, regarding a proposed cancer morbidity study by the Health Department of the Territory of Hawaii. At the regular meeting of the Society held on March 13, 1948, unanimous approval was given to the first phase of this project which would permit Health Department personnel to abstract statistical information on cancer from hospital records. An opinion of the Society was requested on the second phase of this project which proposed that Health Department personnel be utilized by practicing physicians for the follow-up of tumor patients. It was the concensus that this matter required further study. Dr. C. Phillips moved that a committee be appointed to study the proposal of utilizing Health Department personnel for the follow-up of tumor cases and to report their findings at the next regular meeting. This was seconded by Dr. C. Carter and passed. Drs. L. Bernstein, C. L. Phillips and S. Mizuire were appointed to this Committee by the President.

Dr. H. Crawford was requested by the President to report on the formation of a Disaster Council. Dr. Crawford informed the Society that the military authorities advised Dr. Robert Faus, President, Hawaii Territorial Medical Association, of the urgent need for the immediate formation of a disaster council by each county medical society. This was to include surgical, shock and burn teams. Equipment and supplies would probably be provided by the Navy.

Dr. C. Phillips moved that a Disaster Council of six men be elected, consisting of three physicians from Hilo City, two physicians from the rural areas and one dentist, who was to be elected by the Hawaii County Dental Society; that the physicians be elected by closed ballot, each member voting for any five men with the five receiving the highest number of votes to be elected; that the Council elect their own chairman; that they contact Dr. R. Faus for information and advice; and that they make overall plans for the organization and administration of the Disaster Council and its program. This motion was seconded by Dr. H. Sexton and carried unanimously. By closed ballot, the following physicians were selected to serve on the Disaster Council: Drs. A. Orenstein, H. Crawford, and H. Sexton representing Hilo City; Dr. C. Carter and W. Seymour representing rural Hawaii.

The possibility of inviting mainland physicians presenting papers at the annual meeting of the Hawaii Territorial Medical Association for postgraduate lectures in Hilo was announced by the President. More information on this subject was requested.

The meeting was adjourned at 8:25 p.m.

LEO BERNSTEIN, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting of the Honolulu County Medical Society was held in the Mabel Smyth Building on March 5, 1948 with Dr. Hill presiding; 85 members and guests were present.

Dr. George L. Apfelbach, Associate Professor of Bone and Joint Surgery at Northwestern University, and Professor of Surgery at Cook County Hospital, gave an illustrated lecture on *Solved and Unsolved Problems of the Neck of the Femur.*

Dr. Steele Stewart outlined the proposed revisions of the H.M.S.A. and described in detail the work of the Fee Schedule Committee in attempting to draw up a uniform fee schedule for the Territory of Hawaii which would apply to all contractual obligations.

Dr. Hill read a letter from the newly organized Honolulu Academy of General Practice offering to extend its assistance to the Honolulu County Medical Society in all matters pertaining to general practice.

Dr. Thomas S. Min was welcomed as a new member of the society.

The report of the Nominating Committee was read. Dr. Stewart said that under the new H.M.S.A. plan, there will be a new plan for the election of members of the H.M.S.A. board and new terms of office. He suggested that it might be confusing if the Honolulu County Medical Society were to elect new members to the H.M.S.A. Board at the annual meeting in April. It was therefore decided to postpone the election of H.M.S.A. representatives until we had more definite information concerning the new plan. The report of the Nominating Committee will be circulated to the members in order that they may have plenty of time to study it before the annual meeting on April 2.

The chairman stated that Mr. Donald Billam-Walker came to the last meeting of the Board of Governors and described the methods of procedure being followed by the B.B.B. in its investigation of the "kick back" system. The B.B.B. has suggested the use of pledge cards to be signed by physicians who agree not to accept secret rebates. The Board of Governors has endorsed the plan being followed by the B.B.B. and pledged its cooperation in the continuance of this investigation. Dr. Palma read from the Star-Bulletin a six-point program proposed by the B.B.B.

It was moved by Dr. Palma, seconded by Dr. Cloward and passed without a dissenting vote that this society agree to assist the B.B.B. in its program as drafted by the western states and as publicized in the newspapers and to give publicity to this action.

The chairman stated that Dr. Phillips had reported that the Territorial Dental Society has assessed its members $40 apiece and that they will immediately turn over approximately $9000 to the Public Relations fund. The joint fund from the Medical Association and the Dental Society will be set up in a separate account. All expenditures will be made from this joint fund. The Public Relations Committee of the Dental Society will meet regularly twice a month with the Public Relations Committee of the Medical Association to plan and carry out the joint program. They will determine policies to be followed in expending the joint fund.

It was announced that the Board of Governors has decided that no doctor joining the society after January 1, 1948 will be liable for the 1947 assessment. The Board of Governors directed the secretary to proceed in accordance with the by-laws of the Honolulu County Medical Society in relation to members who are delinquent in payment of assessments. The territorial ballot on the special assessment was declared closed as of February 9, 1948. In accordance with that ballot, the 1946 and 1947 assessments were declared binding. The 1948 assessment was voted down. Therefore, those members who have not paid their 1946 and 1947 assessments have been notified that Chapter VI, Section 2f, of the by-laws makes it mandatory to suspend such members on May 9, 1948 (90 days after closing of the ballot). If

any of these members should not pay their assessments before February 9, 1949, they will be dropped from membership.

The chairman read a letter from Hawaii Congress of Parents and Teachers telling of a program inaugurated at the Washington Intermediate School. Since that school no longer has a school nurse, the parents are all being urged to choose a family physician and have that doctor examine and care for their children. The cooperation of the members of the Medical Society is asked for this program.

There being no further business the scientific session was adjourned, at 10:40 p.m. Refreshments were served on the lanai.

* * *

The Annual Meeting of the Honolulu County Medical Society was held on Friday, April 2, 1948 at 7:30 p.m. in the Mabel Smyth Auditorium. Dr. Hill presided; 111 members present.

The following doctors were welcomed as new members of the Society:

Dr. Daniel Robert Kohli
Dr. Yasuyuki Fukushima
Dr. John F. Chalmers

The following doctors were transferred to non-resident membership:

Dr. Paul Wiig
Dr. Samuel Allison
Dr. Charlotte Meller Biddle
Dr. Frederick B. Warshauer

Two doctors have become retired members:

Dr. Louise S. Childs
Dr. E. Nishijima

The chairman announced that a proposal from the Health Department to undertake a ten-year cancer morbidity study in the hospitals had been disapproved by the Board of Governors, unless a better plan could be offered. The Board did not feel that the proposed plan of hiring a statistician and a clerk to compile the records would be the best method or would result in accurate statistics. Dr. Wilbar gave a brief outline of the proposed plan. On motion of Dr. Phillips, duly seconded, and passed without a dissenting vote, the action of the Board of Governors was approved with the request that this matter be referred to the newly organized Cancer Society.

Dr. Phillips read a communication from the Public Relations Committee to the county societies recommending the establishment of a grievance committee in each society to receive and settle matters in which individuals may have complaints of any nature about doctors. A committee of three prominent doctors was suggested. A motion by Dr. Palma, amended by Dr. Nance, that the chairman appoint a grievance committee and that this should serve as a sub-committee of the Public Relations Committee was passed by a vote of 50 to 6.

The chairman announced that the Governor had agreed to appoint a committee for the study of the autopsy situation as proposed by Dr. Majoska, such committee to recommend needed legislation.

The following reports were presented and accepted:

Corresponding Secretary—Dr. H. L. Arnold, Jr.
Treasurer's Report—Dr. J. W. Devereux
Library Committee—Dr. H. H. Walker
Library Board—Dr. F. J. Halford
Committee on Forms of Medical Practice—Dr. Fred Lam
H.M.S.A. Board—Dr. Joseph Palma
Public Relations Committee—Dr. Lyle Phillips
Workmen's Compensation Committee—Dr. Steele Stewart
Program Committee—Dr. Frederick Giles
Postgraduate Committee—Dr. Paul Withington
President's Address—Dr. Rogers Lee Hill

In relation to the Treasurer's report there was a discussion of two matters brought up in the report. The first concerned the Budget. The Library requested the County Medical Society to contribute the sum of $9,988.43 towards its total estimated budget for 1948-49 of $15,998.00. Dr. Devereux reported that the Board of Governors had talked over the Library Budget in relation to the County Society Budget. In view of the financial situation of the County Society at the present time, the Board recommended to the Society that it contribute $8,000.00 toward the Library Budget and recommended that the balance of $1,988.43 be drawn from the income of the Library Endowment Fund. Dr. Walker and Dr. Halford both presented the needs of the Library. They stated that the Library Board of Governors had decided not to draw upon the Endowment Fund until it reached $100,000. On motion of Dr. Halford, duly seconded and passed, the Society voted to appropriate $8,000 toward the expenses of the Library for the coming year with the understanding that the Library would attempt to keep within its alloted income by cutting down on expenses.

The Council had recommended that the county societies consider an increase in territorial dues from $15 per member, per year, to $20 per member. On motion, duly made, seconded and passed, the Board of Governors was authorized to look into means of making up the deficit of the Territorial Medical Association and to report on it at the next meeting of the County Society. On motion of Dr. Phillips, seconded by Dr. Halford, the budget of the Honolulu County Medical Society as presented by Dr. Devereux was approved.

Dr. F. J. Pinkerton made some further remarks in connection with the Public Relations report presented by Dr. Phillips. He stated that the dentists of the territory had presented to the joint Public Relations Committee of the Medical Association and the Dental Society a check for approximately $9000 raised by special assessments upon the dentists. This check is being held pending approval of its acceptance by the Hawaii Territorial Medical Association. Dr. Pinkerton also stated that an individual may now be available to head up the public relations work of the Territorial Medical Association. Dr. Fronk made a strong plea for the doctors to attend precinct meetings, thus taking an active interest in politics. On motion of Dr. Palma, seconded by Dr. West, the Society voted to inform its delegates to the Territorial meeting that they were to keep an open mind as to the future of the public relations program and the cost involved. Dr. Dickson added an amendment to the motion to cover the joint public relations activities of the Dental Society as well as the Medical Association.

The president reported that Dr. R. O. Brown, as chairman, had called the Nominating Committee together some weeks ago. The Committee had drawn up a list of nominations for the coming year providing for considerable choice in election for the various offices. The report of the Nominating Committee was read at the last meeting of the Society and shortly thereafter was mimeographed and circulated to all the members.

Dr. R. O. Brown, Dr. L. Q. Pang, Dr. V. C. Waite and Dr. T. F. Fujiwara were appointed tellers of election. Election was by written ballot with the following results:

President	H. C. Gotshalk
Vice-President	H. L. Arnold, Jr.
Secretary	S. L. Yee
Treasurer	J. W. Devereux
Board of Governors	F. L. Giles, R. L. Hill
	L. Q. Pang, I. L. Tilden

Alternates, Board of Governors.....J. M. Felix, W. S. Ito
O. D. Pinkerton
Board of Censors.....L. A. R. Gaspar, Jr.
Delegates to Hawaii
Territorial Medical Association
a. For two years.....H. R. Benson, Edwin K. Chung-Hoon
William O. French, Tadao Hata
H. M. Patterson, Laurence M. Wiig
b. For one year.....Philip S. Arthur, Douglas H. Murray
Alternate Delegates:
a. For two years.....Maurice de Harne, Takeo Fujii
Paul H. Liljestrand
b. For one year.....Louis L. Buzaid, Joseph Lam
Robert T. Wong
Committee on Forms of Medical Practice.....Robert B. Faus
Preparedness Committee.....R. B. Faus, J. Strode
H. L. Arnold, Sr., R. L. Hill, Steele Stewart

It had been agreed that there would be no nominations for the Preparedness Committee, but that the five men who received the highest number of votes would be designated as the members of the committee. On motion of Dr. Stewart, seconded by Dr. Majoska, it was agreed that the 5 doctors receiving the next highest number of votes would be alternate members of the Preparedness Committee, to be called upon in order if needed.

Alternates of the Preparedness Committee.....Isaac Kawasaki
H. Gotshalk, L. Gaspar, C. Fronk, F. J. Pinkerton

The results of balloting on questions concerning fee schedules were overwhelmingly in favor of the following three questions:

Do you approve in principle the establishment of a single fee schedule for all contractual medical work—Bureau of Crippled Children, Polio Commission, Workmen's Compensation, Veterans Bureau, U.S.P.H., H.M.S.A., etc.?

Do you approve in principle the establishment of the fee schedule on relative values set up in terms of units?

Do you approve in principle the altering of the unit value from time to time—not oftener than once a year—to bring the fees into line with island economy?

Since this was a joint annual meeting of the Honolulu County Medical Society and the Honolulu County Medical Library, the Library also presented its nominations at this time. The election was carried out with written ballots with the following results:

President.....F. J. Halford
First Vice-President.....Paul Withington
Second Vice-President.....Ralph B. Cloward
Library Board of Governors:
a. For two years....Ralph B. Cloward, Thomas F. Fujiwara
Rogers Lee Hill, Kwan Heen Ho
b. For one year.....Thomas Mossman, Wah Kai Chang

SAMUEL L. YEE, M.D.
Secretary

* * *

ANNUAL ADDRESS — 23rd MEETING

Retiring President, Rogers Lee Hill, M.D.

This meeting concludes the twenty-third year of the Honolulu County Medical Society. It has been a rather difficult and trying year. With the conclusion of World War II, the expected peace and contentment of a victorious nation failed to develop. The readjustment period has been lengthened due to many complex moral, social and financial problems. The smoke of the battlefields of the far-flung war had hardly cleared before we found ourselves engaged in a deadly cold war. Already an evil monster rears his ugly head over the freshly scarred battlefields of Europe and casts a menacing shadow, that threatens the peace and security of the world. The same brutal, despotic forces of tyranny that were so successfully defeated in the last war have asserted themselves and indicated their design to rule again by sheer force. The life of freedom of thought and action enjoyed by us in the past is threatened by an ideology that makes mockery of individual initiative. The infiltrating and metastasizing tactics, used so successfully by the fascists, are now in evidence, not only in Europe, but in this country as well. They have permeated many branches of our political, social and educational fraternities. They are insidious in their incipiency, deadly in intent, and lethal in effect. Communism can rarely be identified grossly, but is usually occult in nature. The clinical manifestations are often obscure and difficult to detect unless subjected to the most penetrating and searching examination. To make the obnoxious therapy more palatable, pleasant vehicles are often used for a disguise. Commonly used vehicles are social reforms, etc. I am not opposed to social reforms. I am heartily in favor of those that are practical and necessary, but I am opposed to their continued, disguised administration by certain fanatics who are not always motivated by unselfishness and have for their objective, creation of unrest leading to destruction of our form of government.

The Medical Society is, at the present, engaged in a controversy over socialized medicine that is in all probability analogous to the vehicular disguise technic related to you above. It is not difficult to conceive that once medicine is thoroughly subjected to political control, clothing, food, and other basic and fundamental requirements of life will soon follow. With the thorough incarceration of the basic needs, it is not beyond the scope of imagination to realize that all activities would eventually be dominated by the state. I am not an alarmist; neither am I a defeatist. I believe that now is the time to arouse a sleeping public. Communism is Godless and there can be no compromise with communism. Remember that before the Renaissance, medicine remained subdued under the oppressive heel of the political state for over 1000 years. Not one single advancement was made during this dark period. Are we going to sit idly by and watch history repeat itself?

I would like to excoriate in the same breath an equally obnoxious and repugnant form of control known as fascism. This form of government has occasionally made its appearance in medical societies. It is vicious and will only lead to degradation, discontent and finally dissolution. It has been the desire of the Board of Governors during the past year to encourage free expression and unbiased action. This very election tonight is one of freedom of action unparalleled in the history of this society. You have had ample time to study the list of nominees and make additional ones.

There are other distressing and vexing problems that have plagued us since the end of the war. The moral recession, the breakdown of social restraints, juvenile delinquency, etc., have resulted in crimes and hoodlumism unparalleled in the history of Honolulu. These problems concern the medical profession not only as citizens, but medical consultation and opinion may be a determining factor in their ultimate solution and elimination.

The last year has been exceptional in that apprehension, fear and uncertainty over the future have been dominant in the minds of most people. This uncertainty has not been confined only to problems concerning financial security. Specific medical problems, which have been particularly distressing, concern the general practitioner and the closed hospital staffs. I am sure that these problems have been ever dominant in most of your minds and that they concern your very means of livelihood. The trend of medicine has been unquestionably toward extreme specialism. Our future cause will inevitably be influenced by political and medical trends established on the mainland. Some of these trends are

like elemental upheavals and are as irresistible as the tides over which we have no control. I regret to say that prediction of solution of such important and vexing problems is beyond my power. Public demand is also an irresistible force not to be lightly considered. I have the feeling that these trends are like everything else in life, rhythmical and cyclical in nature, and that the apogee has been reached and sanity will again soon prevail. It is my feeling that there will always be a place for the well trained practitioner. I believe that I speak the sentiment of a majority of physicians when I say that I am unalterably opposed to the closed hospital in Honolulu. A well regulated and carefully supervised open hospital is to be greatly preferred. You may rest assured that whatever happens locally will depend principally upon the desire of this society. We still wield considerable force in this community. Consequently, for your own protection, you must realize that your attendance and vote at these meetings is necessary for your own protection and welfare. The society should see that its members are properly stimulated and encouraged to participate in society affairs. I cannot praise too highly the action of one member in attending faithfully the meetings of the Board of Governors this last year. He demonstrated an interest and action beyond the line of duty. If we can defeat laziness and inertia in this society, we have made a tremendous stride toward perfection.

This last year has been particularly significant in the reactivation of some of the special subsidiary societies and the founding of others. They have relieved the burden of the scientific programs and have stimulated considerable interest and enthusiasm in the various fields of medical endeavor.

The general practitioners have organized and much will be accomplished in their concerted effort. This group has been for some time the forgotten man of medicine. Scorned, abused and at times insulted, they have realized at last that protection is only obtained by organized effort and assertiveness.

I pause, with heavy heart, to briefly eulogize the loss of Dr. James R. Judd, a longtime, active and enthusiastic member of this society. Dr. Judd was a pioneer in surgery in these blessed islands and his exemplary character will always remain as an outstanding landmark in local medical history. We reverently acknowledge his many contributions to the development of this society.

The termination of the year finds the society in good physical and financial condition. The membership has steadily increased and now numbers 299 members. The society is growing, not only in size, but in stature. This very building in which we meet tonight typifies the depth of vision and farsightedness of our leaders. Let us continue to grow and develop and recapture the spirit Vesalius had when he led us out of the anatomical quagmire in 1540.

There seems to be an awakened interest in society affairs and a more generalized appreciation of the value of organized unity and concerted activity. It is now evident that united we stand and divided we fall. Greater interest has been developed in the preparation of papers by individual members; the quality has immeasurably improved and a flame for clinical research has been kindled.

We have been able to obtain more outstanding speakers from the mainland, with the return of normal travel, and their presence has always left a beneficial imprint in medical culture.

The Constitution and By-laws, long known to be antiquated and inefficient to meet the present needs, were completely revised and adopted. They will require revision from time to time.

The greatest single accomplishment of the year and the one we can justifiably look back on with pride is the aid we gave to the establishment of clinics for indigent care at Queen's and St. Francis Hospitals.

The investigation into the vicious practice of optical rebates was begun and I hope that the society will see that it is carried through to a successful termination. It is to be hoped that in the near future, the price of glasses to the public will be fair and just.

A social program was held at one meeting with the wives as guests and it proved to be so successful and enjoyable, it is to be hoped that it will serve as a precedent for many other similar functions.

Before I conclude this address, I would like to express my appreciation to Mrs. Bennett, our able and efficient secretary, who has greatly relieved the burden of the president and is deserving of all the praise that can possibly be bestowed upon her.

I would also like to commend Dr. Lyle Phillips on his excellent work on public relations. Largely as a result of his work and Mrs. Bennett's work, the society's public relations are at an all-time high.

The Board of Governors and officers of the society are deserving of a vote of thanks for the excellent manner in which they have conducted the long tedious deliberation necessary for the proper function of this organization.

I would like to publicly express my appreciation to all of the committees and especially the chairmen who have devoted much time and effort in order to make the society function smoothly.

The action you are taking tonight in electing a medical preparedness committee is commendable and should receive praise from the community, because it signifies a desire for complete medical protection in case of any disaster that might suddenly arise. This disaster might very well be of man-made origin as well as elemental in nature, such as typhoon, flood, fire, or tidal wave. Should this evil monster from Europe strike suddenly, the community can rest assured that the medical society stands ready to assume responsibility for the care of the injured.

Let me express my heartfelt gratitude and appreciation to this society for the honor you bestowed upon me one year ago tonight. It shall always remain a cherished memory throughout the years to come.

You have been cooperative, kind and tolerant and my only hope is that I have contributed a small part to the growth and development of a very fine and splendid county medical society.

KAUAI COUNTY MEDICAL SOCIETY

President William E. Toney called the meeting to order at 7:30 p.m., March 10, 1948, at the Wilcox Memorial Hospital, Lihue, Kauai.

Those present were: Drs. Wade, Brennecke, Toney, Kuhns, Chisholm, Masunaga, Wallis, Boyden, Fujii, and Cockett. Drs. Steele Stewart, Horton, and Ishii, as well as Mrs. Edith Bennett, were present as guests.

The secretary reported that Dr. Kenneth Fujii's family wrote a letter of thanks for a wreath sent to the funeral of Dr. Fujii's father in Honolulu.

Dr. Toru Nishigaya sent a letter of appreciation for the silver trophy sent to him by the Kauai County Med-

ical Society for the triple tie in the last Hawaii Territorial Medical Association Golf Tournament held on the island of Kauai.

A verbal invitation from the Director of the Department of Public Welfare in Lihue, Kauai, for a member of the Kauai County Medical Society to participate in their social service convention from May 13-15, 1948 at Lihue was presented to the members as a whole. After some discussion, it was moved, seconded, and unanimously passed that the secretary request the chairman of the Medical Economics Committee of the Hawaii Territorial Medical Association to send a member to represent the medical profession.

The Constitution of the Kauai County Medical Society was read to the members by the secretary.

Dr. William Goodhue was unanimously elected a member of the Kauai County Medical Society.

Election of officers was held with the following results:

President	Dr. Patrick M. Cockett
Vice-President	Dr. Eichi Masunaga
Secretary-Treasurer	Dr. William Goodhue
Delegate	Dr. Marvin Brennecke
Alternate Delegate	Dr. Webster Boyden
Board of Censors	Dr. Jay Kuhns

Dr. Boyden made a motion for the purchase of two copies of "A History of the American Medical Association" by the Kauai County Medical Society. One copy is to be put into the Lihue Public Library and one in the Wilcox Memorial Hospital Library, temporarily, until it can be transferred to the Hanapepe Public Library.

Mrs. Edith Bennett, Executive Secretary of the Hawaii Territorial Medical Association, spoke about the public relations program as it is now being carried on by the Territorial Association.

Dr. Steele Stewart talked on a new uniform fee schedule to embody industrial accidents, the Hawaii Medical Service Association, and veterans' groups. He mentioned that the new Hawaii Medical Service Association policy would cover hospital calls only but that there would be a new medical fee as well as the present surgical fee established.

The meeting was adjourned at 10:45 p.m.

PATRICK M. COCKETT, M.D.
Secretary

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Dr. Patrick M. Cockett, newly elected president of the Kauai County Medical Society for the year 1948-1949, called the meeting to order at 7:50 p.m. on April 14, at the Wilcox Memorial Hospital in Lihue.

Members present were: Drs. Chisholm, Cockett, Fujii, Goodhue, Liu, Masunaga, Wade, and Wallis. Guests present were: Drs. Bickell, Burns, Ishii, and Mason. Dr. F. Bernard Schultz, cardiologist, was present as guest speaker.

The Secretary read the minutes of the previous meeting and after one correction, they were approved as read. The correction was that Dr. Toru Nishigaya received a gold instead of a silver trophy from the Kauai County Medical Society for the triple tie in the last Hawaii Territorial Medical Association Golf Tournament held on the island of Kauai.

Mr. A. H. Achor of the Kauai Medical Service Association announced that Mr. Patterson is now the new Director of the Hawaii Medical Service Association and spoke in regard to a change of some of its previous policies.

The minutes of the meeting of the Council of the Territorial Medical Association dated March 17, 1948, relating to government physicians were read. The antiquated system of socialized medical care furnished the Welfare patients by the government physicians on Kauai was discussed. It was approved by the members present to have the delegates of the Kauai County Medical Society bring to the attention of Drs. Faus and Pinkerton during the annual Territorial Medical Association Convention in Honolulu in May 1948, that the government physicians on the island of Kauai still favor a reorganization of their positions.

The government physicians on Kauai agreed to resign their positions if the majority of the other government physicians in the Territory also resign, but they will continue to serve and fulfill their duties within the Department until the following changes are made by the next Territorial Legislature and the Board of Health:

a. Fee for service and professional care of welfare patients, with the patients having free choice of physicians.
b. The position of registrar to be performed by a clerk at a fixed salary.

The reasons government physicians on Kauai are not satisfied with their positions are:

a. Insufficient drug quota received from the Territorial Board of Health with the result that plantation dispensaries and private physicians have to make up the deficit.
b. Insufficient income for professional services rendered.
c. The assistant registrar is paid a salary by the government physicians on Kauai almost equal to the salary the physicians receive from the Territorial Board of Health.
d. The stand of Welfare patients in taking advantage of government physicians by requesting unnecessary home visits.

Committee appointments:

Program: Dr. P. Cockett, Chairman
Legislative and Public Policy: Dr. S. Wallis, Chairman
Grievance: Dr. D. Liu, Chairman
Medical Advisor (Dept. of Public Welfare): Dr. M. Brennecke, Chairman
Public Health: Dr. D. Chisholm, Chairman
Library: Dr. E. Masunaga, Chairman
Hawaii Medical Service Association: Dr. K. Fujii, Chairman
Medical Economics: Dr. W. Boyden, Chairman
Woman's Auxiliary: Dr. S. Wallis, Advisor
Disaster and Medical Preparedness: Dr. B. Wade, Chairman
Cancer: Dr. J. M. Kuhns, Chairman

Letters of application for membership in the Kauai County Medical Society submitted by Drs. E. A. Bickell and C. H. Ishii were passed favorably by the Board of Censors and they will be voted on at our next medical meeting.

A letter from Dr. Quisenberry of the Bureau of Venereal Diseases and Cancer Control of the Territorial Board of Health which recommended the adoption of a special cancer questionnaire form to be filled out on all cases of cancer was read. There was some discussion. However, no action was taken.

An excellent talk was given by Dr. F. Bernard Schultz on cardiac emergencies, recent advances in treatment, and the electrocardiogram.

An effort will be made to bring more specialists to Kauai in order to keep the members informed on new treatments and recent advances in medicine and surgery.

A movie on Pediatric Anesthesia was shown at 7:00 p.m., before the regular monthly meeting of the Kauai County Medical Society.

The meeting adjourned at 11:10 p.m.

WILLIAM W. GOODHUE, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The regular meeting of the Maui County Medical Society was held at the Malulani Hospital on March 9, 1948, at 6:15 p.m. The following members were present at the meeting: Dr. Frank St. Sure, Jr., presiding; Drs. Wong, Shimokawa, Burden, Tompkins, Beland, Sanders, Underwood, Cole, E. Kushi, H. Kushi, Fleming, Kanda, Izumi, Patterson, McArthur, and Rockett. Guest present was Dr. Haywood. Malulani Hospital served dinner to the physicians, after which the meeting was called to order by the president, Dr. Frank St. Sure, Jr.

The treasurer's report was read by Dr. Kanda. It showed a balance of $2,675.87 in the treasury on November 11, 1947, and a balance of $576.12 on March 9, 1948.

The president read parts of letters exchanged between Dr. Quisenberry and Dr. Batten asking for permission from the Territorial Medical Association to conduct morbidity studies on cancer in the Territory of Hawaii. There was also a letter from the Attorney General in which it was stated that hospitals would not be held liable for reported cancer cases to the Board of Health. Following these letters, there were some long discussions for and against the proposal of making cancer a "reportable disease." Finally a committee of the following doctors was appointed to look into the plan and make a report to the next meeting: Drs. McArthur, Izumi, and Tompkins.

A request from the Territorial Medical Association was read in which it was asked that the County Medical Society form a "Grievance Committee" of three members to take care of any difficulties that might arise between the Public and the Medical Society. Dr. St. Sure added these duties to the previously appointed committee of Public Relations and Medical Economics. It was stated that all complaints made to this committee were to be made in writing, and all records of action taken up by the committee should also be made in writing and be kept.

A discussion on the advisability of procuring a pathologist for the island of Maui was initiated by Dr. Patterson. It was suggested that between the County and the various interested plantations, it might be possible to finance a pathologist. Dr. McArthur moved that the Maui County Medical Society go on record as advocating a full time pathologist for the island. The motion was passed.

Dr. Sanders announced that he was going to Honolulu to attend the council meeting on March 17. Dr. McArthur suggested that the councillor bring up at the meeting the awarding to Dr. Arnold, Sr. some appropriate token of appreciation for all the work that he did immediately after Pearl Harbor Day and in the earlier part of the war.

Dr. Tompkins, chairman of the nominating committee, announced the nominees for office for the coming year. The following were elected:

President.....Dr. T. W. Kanda
Vice-President.....Dr. Robert F. Cole
Secretary-Treasurer.....Dr. Edward B. Underwood
Board of Governors.....Dr. William Patterson
Dr. E. T. Shimokawa, Dr. K. Izumi

Dr. Patterson was elected as Delegate with Dr. Izumi as his alternate.

Following the business meeting, the meeting was turned over to the program chairman of the Malulani Medical staff, Dr. H. Kushi. The following case reports were presented:

(1) Appendicitis with case report on Jackson's veil—by Dr. McArthur.
(2) Appendicitis—acute gangrenous type following colds—by Dr. K. Izumi.
(3) Psoas Abscess—by Dr. L. S. Rockett.
(4) Rapidly Forming Abdominal Tumor—by Dr. E. Shimokawa.

Meeting adjourned at 10:00 p.m.

T. W. KANDA, M.D.
Secretary-Treasurer

* * *

A special meeting of the Society was held on March 23 at 6 p.m. in the Maui Grand Hotel, to which the members of the Maui County Dental Society were invited. The purpose of the meeting was to hear the latest reports on the activities of the Medical Economics Committee of the Territorial Association, and the present status of the revised fee schedules given by Drs. Lyle Phillips and Steele Stewart respectively.

Members present: Drs. Rothrock, Dunn, Wong, Burden, Underwood, Cole, McArthur, Sanders, Izumi, H. Kushi, St. Sure, Fleming, Tompkins, Beland, Patterson, Shimokawa, Rockett, Reppun, and Tofukuji. Visitors: Drs. Haywood and Toney. Dentists present: Drs. Lloyd Colton, F. Hamamura, M. Hamamura, S. Nashiwa, H. Tamura, and P. Wong.

Dr. Phillips gave a resume of the work done by the Medical Economics and Public Relations Committee over the past years. He emphasized the increased need for this committee due to the activity of those groups inimical to organized medicine and the proponents of socialized medicine. Dr. Phillips closed his talk by advising that doctors must choose sides politically unless they want proponents of political medicine in power. Once unfavorable laws are passed, doctors should not injure their standing by non-compliance.

Dr. Steele Stewart reported on the plans for revising H.M.S.A. At the present time a new plan is being drawn up which will eliminate office calls but will provide basic hospitalization. Superimposed on this basic plan will be more complete plans supplying surgical service, obstetrical service, medical service or a combination. The subscriber will have his choice of plans.

A new fee schedule covering all contractual relationships is being drawn up at the same time. This will include fees for services for H.M.S.A., Workmen's Compensation and insurance cases as well as for veterans. The new schedule would set up standard fees for treating all classes of cases based on a fair return for services to the doctor as well as being based on the patients' financial ability to pay.

The meeting was adjourned at 11:00 p.m.

E. B. UNDERWOOD, M.D.
Secretary-Treasurer

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MRS. ETHEL HILL, *Librarian*

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RECENT ACQUISITIONS

Anatomy & Physiology

King, B. G. *Anatomy and physiology laboratory manual and study guide.* 3rd ed. c1948. (Gift of publisher.)
Luck, J. M., ed. *Annual review of physiology.* v.10. 1948.

Anesthesia

Gillespie, N. A. *Endotracheal anaesthesia.* 2nd ed. rev. c1948.
Leake, C. D. *Letheon; the cadenced story of anesthesia.* c1947. (Gift of author.)

Communicable Diseases

Bower, A. G. *Communicable diseases for nurses.* 6th ed. c1948. (Gift of publisher.)
Top, F. H. *Communicable diseases.* 2nd ed. c1947. (Gift of publisher.)
Wilson, G. S. *Topley and Wilson's principles of bacteriology and immunity.* 2v. 3rd ed. rev. 1946.

Embryology

Jordan, H. E. *Textbook of embryology.* 5th ed. c1948. (Gift of publisher.)
Potter, E. L. *Fundamentals of human reproduction.* c1948. (From Nurses' Association.)

Gynecology & Obstetrics

Dickinson, R. L. *Control of conception.* c1931. (From Palama Clinic.)
Karnaky, K. J. *Practical office gynecology.* c1947. (Gift of publisher.)
Litzenberg, J. C. *Synopsis of obstetrics.* 3rd ed. c1947. (Gift of publisher.)
Stix, R. K. *Controlled fertility.* c1940. (From Palama Clinic.)

Industrial Medicine

Johnstone, R. T. *Occupational medicine and industrial hygiene.* c1948. (Gift of publisher.)
McBride, E. D. *Disability evaluation.* 4th ed. rev. c1948.

Neurology & Psychiatry

Biddle, W. E. *Introduction to psychiatry.* 2nd ed. c1948. (Gift of publisher.)
Bonin, Gerhardt von *The neocortex of macaca mulatta.* c1947. (Gift of University of Illinois.)
Cobb, Stanley. *Foundations of neuropsychiatry.* 3rd ed. rev. c1944. (Gift of Library of Hawaii.)
Dandy, W. E. *The brain.* n.d. (Gift of Dr. F. J. Halford.)
Davidoff, L. M. *The normal encephalogram.* c1937. (From Bureau of Mental Hygiene.)
Dyke, C. G. *Roentgen treatment of diseases of the nervous system.* c1942. (From Bureau of Mental Hygiene.)
English, O. S. *Common neuroses of children and adults.* c1937. (From Bureau of Mental Hygiene.)
French, T. M. *Psychogenic factors in bronchial asthma, pts. 1 and 2.* c1941. (From Bureau of Mental Hygiene.)
Langfeldt, Gabriel. *The prognosis in schizophrenia and the factors influencing the course of the disease.* 1927. (From Bureau of Mental Hygiene.)
Neal, J. B. *Encephalitis; a clinical study.* c1942. (From Bureau of Mental Hygiene.)
Ogilvie, R. S. *Manual of electroencephalography for technicians.* c1945. (From Bureau of Mental Hygiene.)
Rowbotham, G. F. *Acute injuries of the head.* 1942. (From Bureau of Mental Hygiene.)
Selling, L. S. *Synopsis of neuropsychiatry.* 2nd ed. c1947. (Gift of publisher.)
Witzleben, H. D. von *Methods of treatment in post-encephalitic parkinsonism.* c1942. (From Bureau of Mental Hygiene.)

Pharmacology & Therapeutics

Beckman, Harry. *Treatment in general practice.* 6th ed. c1948. (Gift of publisher.)
Cutting, W. C. *A manual of clinical therapeutics.* 2nd ed. c1948. (Gift of publisher.)
Sollman, Torald. *A manual of pharmacology.* 7th ed. c1948. (Gift of publisher.)

Psychopathology

Abraham, Karl. *Selected papers of Karl Abraham.* 1942. (From Bureau of Mental Hygiene.)
Allen, Clifford. *Modern discoveries in medical psychology.* c1941. (From Bureau of Mental Hygiene.)
Ames, E. S. *The psychology of religious experience.* c1910. (From Bureau of Mental Hygiene.)
Beverly, B. I. *A psychology of growth.* c1947. (From Nurses' Association.)
Bingham, W. V. *Aptitudes and aptitude testing.* c1937. (From Bureau of Mental Hygiene.)
Cattell, Psyche. *The measurement of intelligence of infants and young children.* c1940. (From Bureau of Mental Hygiene.)

Goldstein, Kurt. *Abstract and concrete behavior.* 1941. (From Bureau of Mental Hygiene.)
Hart, Bernard. *Psychopathology.* 1927. (From Bureau of Mental Hygiene.)
Healy, William. *The structure and meaning of psychoanalysis.* c1930. (From Bureau of Mental Hygiene.)
Henry, G. W. *Essentials of psychopathology.* c1935. (From Bureau of Mental Hygiene.)
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BOOK REVIEWS

Treatment in General Practice. By Harry Beckman, M.D. Sixth Edition. Price $11.50. 1129 pp. W. B. Saunders Company, Philadelphia and London, 1948.

Very few medical books are written with a sense of humor, and indeed, levity has no place in medicine. But a healthy skepticism and a keen appreciation of the incongruous do much to lighten the tedium of many hours of necessary scientific reading. It is consequently a distinct pleasure to find lively and penetrating humor in a book which is "must" reading.

First published in 1930, this book is now in its sixth edition, and the author hopes to bring out a new edition every two years, in order to keep his readers abreast of therapeutic advances. Addressed primarily to general practitioners, it is tremendously valuable to internists and medical students as well because it offers an intensely comprehensive coverage of the treatment of practically all diseases. It is to therapeutics the same handy, concise, and satisfying reference text that Cecil is to medical diagnosis.

The book's completeness is difficult to describe—it simply leaves out nothing in the line of treatment. The most modern treatments with scientific rationale stand side by side with time-honored empirical remedies. The benefits of medical experiences with tropical diseases in the recent war and many new disease entities (such as Melioidosis, Rickettsialpox, and Penicillin Reactions) are included. Diseases are systematically grouped (Infectious, Allergic, Deficiency, etc.) and a refreshing thumbnail sketch of each condition precedes the presentation of therapy. Surgery and its allied specialties are excluded, of course, as are certain infectious diseases (Asiatic cholera, leprosy, plague, trypanosomiasis, and yellow fever) which nowadays are almost exclusively the province of public health authorities. A sixty-six page list of recent references attests the authoritative and exhaustive nature of the author's study.

The sixth edition brings this book to a brilliant level of up to date completeness. No one interested in bringing the best to his patients can neglect it.

C. A. Domzalski, Jr., M.D.

A Manual of Pharmacology. By Torald Sollmann, M.D. 7th Edition. 1132 pp. Price $11.50. W. B. Saunders Company, Philadelphia and London, 1948.

This standard textbook is familiar to all physicians. It has been brought up to date and includes information about all the newer drugs such as the antibiotics. The book is encyclopedic in scope and completely authoritative and detailed. The only criticism is the lack of synthesis of the vast amount of material covered. There is little or no generalization on the pharmacological action of various groups of drugs. It is, however, an excellent source book and is warmly recommended for the bookshelves of all practicing physicians.

John L. Bell, M.D.

Anatomy and Physiology Laboratory Manual and Study Guide. By Barry Griffith King, Ph.D., and Helen Maria Roster, B.A., M.A., R.N. Third Edition. 267 pp. Price $3.00. W. B. Saunders Company, Philadelphia and London, 1948.

The material presented in this manual has been selected for the purpose of summarizing and demonstrating anatomical and physiological information. A wide variety of experiments is included which would allow the instructor to choose those exercises which would be most suitable considering the length of the course to be given and the laboratory facilities of the school. Most of the equipment suggested is easily obtainable and the instructions for experimentation are clear and concise. The appendix gives the necessary information about the anesthetization of experimental animals and directions for the construction and use of the special equipment.

The diagramatic illustrations of this manual are large and the student should have little trouble in recognizing the various structures. There is adequate space for labeling of diagrams and for the answering of the summarizing questions.

The Manual and Study Guide should be a valuable aid in the teaching of this subject as it conforms with the provisions of the Curriculum Guide and gives the student information which will be applicable in her nursing studies.

Miriam L. Keller, R.N.

Psychological Atlas. By David Katz. 142 pp., 396 illustrations. Price $5.00. Philosophical Library, New York, 1948.

In the author's own words, his primary intent in compiling this Atlas "is not that of making a contribution to science, but that of arousing a zeal for the study of psychology." With this purpose in mind, he presents graphic materials collected over the years which he has found to be helpful in illustrating lectures and discussions. The material contains references to various fields, among them physiological psychology, animal psychology, applied psychology, and the psychology of physical handicaps.

There is need for an occasional reminder, perhaps, for those of us who tend to forget the many applications outside the clinical field and the work carried on in other localities and at other times. Much of the material presented here will be new to students in this country. Ignoring the lack of modern scientific approach it is entertaining to read about studies of diet and facial expressions, facial asymmetries, dowsing, physiognomy, and chiromancy. In addition, it is interesting—and perhaps somewhat surprising—to see what foreign students of psychology learn about the work of the American psychologist.

The explanatory comments (which the author himself feels are brief and inadequate) frequently give a superficial and over-simplified interpretation of the material. It may be felt that such a criticism is unjustified since the author makes such modest claims and hopes merely "to stimulate the young student to relate this textbook knowledge to a concrete situation." If one considers that the book is to be used chiefly for pleasure and for stimulating interest, however, it is unfortunate that the material was apparently arranged primarily for the convenience of the typesetter and engraver. All the explanatory comments are given in Part I, and all the pictures to which they refer are in Part II. Such an arrangement seems calculated to discourage the casual reader and seriously interferes with the author's attempts to maintain the appeal of a popular illustrated lecture.

If this Atlas is to be used merely as a starting point for further reading and research on various topics—well and good. If taken alone and at its face value, however, it is likely to give somewhat misleading impressions of the past development and present status of psychology.

VERNA MARONEY, M.S.

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Medical Clinics of North America. Boston Number. Symposium on Specific Methods of Treatment. 1059-1319 pp. Price $16 a year. W. B. Saunders Company, Philadelphia and London. 1947.

Most medical men need no introduction to the *Medical Clinics series.* The volume under consideration maintains the usual high standard in presenting the latest concepts of the Boston Clinics with respect to the clinical management of a number of important disease entities. In addition to being an excellent survey of present day thinking in medicine, the book contains a large amount of very useful practical therapeutic information. The volume is a "must" for every internist and a "should" for anyone desirous of keeping up-to-date in medical progress.

H. H. WALKER, M.D.

Psychobiology and Psychiatry. By Wendell Muncie, M.D. Second Edition. 620 pp. 70 illustrations. Price $9.00 . The C. V. Mosby Company, St. Louis, 1948.

Dr. Muncie has done a thorough job of editing to produce this second edition. He has removed some portions which are elsewhere well covered, and shortened others as well as added considerable material concerning recent advances in therapy, especially on prefrontal lobotomy. It would appear that this author, unlike many, firmly intends to prevent succeeding editions of his work from becoming more cumbersome and outdated.

This book contains an excellent, although somewhat self-conscious, presentation of the fundamentals of the Meyerean viewpoint. Written for students, it seems somewhat too all-embracing for teaching purposes; on the other hand, it is not specific enough in discussion of treatment as actually carried out for use by psychiatrists or practitioners.

This reviewer feels that Dr. Muncie has at times deserted the eclectisism which he professes in his defense of psychobiology *as against* other psychiatric approaches. The volume stands, however, as a most valuable survey of the field of psychobiology and as a monument to the forthright, practical and human approach of its author.

BRYANT WEDGE, M.D.

* * *

Pamphlets that Pull. By Alexander L. Crosby. 32 pp. Price $1.00. National Publicity Council, New York.

Here is a very readable booklet giving sound advice and practical suggestions for anyone who has the responsibility for composing pamphlets about health topics or welfare agencies. A discussion of the most effective forms and styles for such publications is followed by valuable and up-to-date information on printing costs which will help to cut down printing expense without losing reader interest.

EDITH C. BENNETT

REMINISCENCES OF DECEMBER SEVENTH: V

Dr. Rogers Lee Hill stated that on the morning of December 7, 1941, he went to the Halekulani Hotel in order to bring Dr. Moorehead to the Mabel Smyth Memorial Building for a lecture. They drove through Fort De Russy and by Fort Armstrong and saw the flack and smoke and heard the explosions. Shortly after his arrival he met someone who told him that the war had broken. He and Dr. Moorehead discussed the matter but both rather pooh-poohed the idea. However, he returned home to see about his family, and they had already heard the news on the radio.

They then proceeded to Mabel Smyth Memorial Building for Dr. Moorehead's lecture. When he arrived at the building he was very shortly called to The Queen's Hospital, where he took care of the first casualty of the 7th so far as the civilian population was concerned. It was a man from comparatively close to the hospital who was brought in with his spleen, one kidney and liver partially shot out, and a great gaping wound in his back. They tried to give him plasma but the man did not survive. From that time on Dr. Hill, who had been placed on one of the surgical teams that was supposed to report at Schofield General Hospital, worked at Queen's Hospital with Drs. Judd, Bell, and an intern, Dr. Harold Sexton. He stated that they had a number of bilateral amputations to do, and that they lost all but the last one. As he looks back at it he feels that the operations were done too early, and that if he were confronted with the problem again he would place a tourniquet on the legs and leave it for six or eight hours, and then amputate at the site of the tourniquet, meanwhile giving the patient blood and plasma in order to make up for fluid losses. He stated that Dr. Sexton went to the ward and called for volunteers from hernias and appendices and other convalescent patients to donate plasma, as all the blood and plasma which they had had in the bank had been removed to Tripler General Hospital. He was called to go to Tripler General Hospital, but was so involved with casualties at Queen's that it was impossible for him to go. He stated that the civilian casualties were either so bad that they could not be saved, or they were comparatively minor. He mentioned a woman who was hit by a piece of shrapnel in the region of her breast bone, and the shrapnel travelled along one of the ribs, cutting off the rib down to the pleura but not perforating the pleura. The wound was cleansed and sewed up and the woman made a perfectly satisfactory recovery. He stated that they were short of material at Queen's Hospital in the way of gloves and gowns, and that he and Dr. Bell and Dr. Judd took turns in operating on the severe wounds. He was busy at the hospital till dinnertime.

After dinner he went home and blacked out his automobile lights. Dr. Smith called from Tripler Hospital and asked if Queen's could take care of a lieutenant with acute appendicitis, as conditions did not justify it at Tripler. Dr. Hill went down to Queen's, saw the lieutenant and decided to wait, as it did not seem to be too urgent at the time. (He removed the appendix at Queen's two days later because it did not subside.) He then went home and was called out again some time later because of a Colles's fracture of the arm which he reduced. At the same time a man was admitted with multiple fracture of ribs and a lacerated scalp. They sutured the scalp and hospitalized him for the ribs. He was in poor condition at time of admission and died later that night. These were accidents involving people unaccustomed to sudden blackout.

On the 8th he was ordered to report to Kamehameha School, which was the new and third General Hospital that they established that day in the Territory of Oahu. He and Dr. Bowles established a casualty clearing station in the Dispensary of Kamehameha School, and slept at the Dispensary that night. It was either on the 8th or 9th that he met Dr. F. J. Halford, and Dr. Halford secured from him some 5000 surgical needles and 5000 yards of silk for doing intestinal suturing. This was not to take care of the casualties of the 7th, but was in preparation for any all-out blitz that might occur.

He stated further that one night after the 8th he took a room at Queen's Hospital and stayed there throughout the night, because of the danger of going from his home to the hospital if he was called, due to the irresponsibility of the men who had been placed on guard duty. They were inclined to shoot and ask questions afterwards. The result was that there were a good many civilian casualties after the night of the 7th. One which he

mentioned was that of a man who was walking along when his hat blew off. As he stooped to pick up his hat some guard shot and took off a large section of the front of his abdomen down to his peritoneum. This man made a satisfactory recovery.

At no time did Dr. Hill work at Tripler General Hospital.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

ROGERS LEE HILL, M.D.

* * *

Dr. Hing Biu Luke was awakened on the morning of December 7, 1941 by his wife telling him that Pearl Harbor was being bombed. She stated that she heard it over the radio about 8 a.m., but he is not certain as to the time that she woke him. He thought his wife was joking and turned on the bedroom radio. Upon hearing music, he was convinced that it was a joke till in a few minutes he was paged by telephone and radio to report to Tripler. He dressed and without stopping to eat breakfast rushed to The Tripler General Hospital, going by way of King Street. At the intersection of King and Middle Streets a military policeman was holding up all cars, inquiring as to their destination and routing them away from the source of trouble. This delayed him about 15 minutes in getting to The Tripler Hospital. Anti-aircraft guns were going but he heard no small arms firing. At Tripler Hospital there were some 20 wounded lying on the lawn and the army doctors were giving them tetanus antitoxin and morphine. He reported to a sergeant who asked him about his surgical classification. He lost about 15 minutes more waiting for a decision as to where he was needed most urgently. He then went to one of the wards on his own initiative. He helped a captain there with treatment of hemorrhage and shock. There were no plasma and blood but there were two jars of saline. There were no sterile instruments until a nurse came and sterilized them. About 15 minutes after reaching the ward, a Japanese bomber came over quite low followed by anti-aircraft fire. The doctors and corpsmen rushed to the windows and yelled like baseball fans for the anti-aircraft men to get the bomber. However, they were disappointed.

About an hour later he went to surgery where there were a group of civilian doctors operating. However, there were a couple of army doctors there helping locate instruments and surgical dressings. By that time blood had begun to arrive. Dr. Cooper was giving blood. Drs. Cooper, Moorehead, Halpern, Strode, R. O. Brown, and K. C. Chock were among the ones he remembered being present. There was a great shortage of instruments, but they did the best they could, doing debridements and suturing wounds. He recalls Dr. Strode and Dr. R. O. Brown trying to work on an injured kidney. Work continued until about 2 o'clock when things were pretty well cleaned up and they were given a good lunch. They then went back to surgery. Upon observing conditions well controlled there, he returned to the wards where he met Dr. Yang and they poured sulfanilamide powder into and sutured many lacerations. He cannot recall having had supper, but continued working until 10 or 11 o'clock and was told to return in the morning. He went home with his lights off.

He said that the army tried to cooperate in every way, but they were short on everything. At no time did he return to his office for tools or dressings, but these began to arrive about an hour after he reached Tripler. In the wards in which he worked, beds were well set up. He did not see that much first-aid had been given to the patients, although he recalled a few tourniquets but very little splinting. Most of the cases were flesh wounds. He recalls some very badly mutilated patients; one with a compound fracture of both bones of the legs and a fracture of the arm, and a lieutenant who had a chest wound who died because they had nothing to work with except to plug the wound. He recalls the very pleading look in the lieutenant's eyes, but the lieutenant made no complaint.

"I have read the attached report of my conversation and it is true to the best of my knowledge and belief."

HING BIU LUKE, M.D.

NOTES AND NEWS

DR. MICHELE GERUNDO, recently of Hilo, has been appointed Director of the Laboratory of the St. Francis and of the Kapiolani Hospitals, Honolulu. He had his training in Naples, Paris, Guatemala and Mexico, receiving the degree of M.D. from the University of Mexico and the degree of Ph.D. in Microbiology from the University of California. He has been for many years Pathologist at Topeka State Hospital, Topeka, Kansas, where he has been actively engaged in research work. He has taught Pathology and Clinical Pathology at the University of South Dakota and Hematology at the University of California at Los Angeles, where he has been engaged in graduate studies and research in Microbiology. He was Director of Laboratories at St. Mary's Hospital, Madison, Wisconsin, before coming to Hawaii where he has served for over one year as Director of Laboratories at Hilo Memorial Hospital and Pathologist for the hospitals of the entire island. He is greatly interested in carrying on research work and educational programs. He is a member of the Sigma Xi Research Society and American Federation for Clinical Research. He has published so far fifty papers, which include work on the pathology of dementia praecox, leukemia, studies on the nature of complement tubercle bacillus and mode of action of sulfonamides.

DR. ROBERT H. MARKS, chief of the Bureau of Tuberculosis Control, of the Territorial Board of Health, has resigned his position to become medical director and superintendent of the Jefferson Sanatorium, Birmingham, Alabama. He will also serve as assistant professor of medicine at the University of Alabama.

DR. FRANK GAUDIN, of Honolulu, has returned from Switzerland with his bride, the former Dr. Pierrette Kennel, of Geneva. Dr. Gaudin visited pediatric clinics and hospitals in Ireland, England, France and Switzerland, on a recent tour of Europe.

DR. FRANCIS J. HALFORD has returned to his duties at the Medical Group, where he is director of industrial medicine. He recently studied at Columbia University, in New York, for a period of seven months, specializing in industrial medicine, labor relations, labor management and health education.

DR. YASUYUKI FUKUSHIMA, a native of Wahiawa, has opened his offices in the Victoria Medical Building, Honolulu, for the practice of general surgery. Dr. Fukushima recently completed a three and one-half year residency at the Barnes Hospital, St. Louis, Mo., under Dr. Evarts A. Graham and the surgical staff of Barnes Hospital. He completed his pre-medical training at the University of Hawaii in 1940, and his medical training was obtained at Washington University, St. Louis, graduating in 1943. He interned at the Barnes Hospital prior to his residency.

DR. AND MRS. GARTON E. WALL, of Ewa, are the parents of a second son, their fourth child, who was born at The Queen's Hospital on March 19. He has been named Lawrence Alexander.

DR. TELL NELSON, of Honolulu, was married on March 27 to Mrs. Teresa Paradine Dickie, formerly of Bay Ridge, New York.

DR. DANIEL R. KOHLI, a native of Monroe, Wisconsin, is now associated with DR. HARRY CHANDLER at the Oahu Sugar Co., Ltd., Waipahu, Oahu. Dr. Kohli is a graduate of the Northwestern University Medical School in 1942 and served an interneship at the U. S. Naval Hospital, Pearl Harbor. He served as a commissioned officer in the Navy from 1941 to 1947.

HAWAII

DR. KWAI SUNG CHANG, a native of Hilo, has opened his offices there for the practice of medicine and surgery. He was graduated from the University of Pennsylvania School of Medicine in 1944, following which he interned at the Philadelphia General Hospital. He served a residency at Taylor Hospital, Ridley Park, Pa., for two years and then took six months of internal medicine at the Tufts Post Graduate School, Boston. Dr. Chang finished his pre-medical work at the University of Hawaii, in 1941.

KAUAI

DR. ROBERT J. M. HORTON, Kauai County health officer, has left to accept a position as epidemiologist with the department of public health, Seattle, Washington.

CHICAGO MEDICAL SOCIETY

The Chicago Medical Society is offering physicians of the country two postgraduate courses in September. A course in Hematology and Neurology will be given September 13-September 18 and another in Cardiovascular and Respiratory

Diseases will be given September 20-September 25, 1948.

The sessions will be held in Thorne Hall on Northwestern University Medical School campus.

An outstanding group of teachers from all sections of the United States will make up the faculty.

Information may be secured by writing the Chairman, Committee on Postgraduate Medical Education, Chicago Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois.

HONOLULU ACADEMY OF GENERAL PRACTICE

The new officers of the Honolulu Academy of General Practice, elected on March 3, are: President, A. V. Majoska, M.D.; Vice-President, H. Q. Pang, M.D.; and Secretary-Treasurer, A. L. Vasconcellos, M.D. At the same meeting Dr. Steele Stewart presented the plans for revision of H.M.S.A. and the fee schedules.

On March 31 Dr. A. S. Price and Mr. Carl Flath discussed policies of hospital administration affecting the general practitioner.

The organization of the Honolulu Academy of General Practice is in line with the recent emphasis being given the general practitioner by the American Medical Association. The Academy is interested in all that concerns the general practitioner. Problems of fee schedules and staff appointments have been considered. Papers will be presented by its own members and by other doctors.

HONOLULU SURGICAL SOCIETY

At the last meeting on March 19, the Society was honored by an address by Dr. Vincent O'Conor, professor of Urological Surgery at the University of Illinois, Chicago. Dr. O'Conor spoke on the subject of "Conservative Surgical Treatment of Hydronephrosis." This paper was followed by case presentations of related urological conditions by several local and service urologists.

HONOLULU OBSTETRICAL AND GYNECOLOGICAL SOCIETY

At the meeting of this Society on March 15 a paper was delivered by Drs. F. C. Spencer and P. S. Arthur on "The Treatment of Carcinoma of the Uterine Cervix." Discussion was opened by Dr. Peter Washko. A second paper was presented by Dr. Thomas W. Cowan on the subject of "The Use of Penicillin in the Prevention of Ophthalmia Neonatorum." The discussion was opened by Dr. Phillip Corboy.



O. B. PATTERSON

H.M.S.A. APPOINTS NEW EXECUTIVE DIRECTOR

Culminating several months' effort to secure the highest caliber of executive leadership, the Reorganization Committee of Hawaii Medical Service Association recently announced the appointment of Mr. O. B. Patterson as Executive Director of the Plan.

During the past six months intensive study has been applied to the basic structure and various service programs of H.M.S.A., with the objective of strengthening the organization and developing a program which would meet the needs of the public in terms of the economics of catastrophic illness and, at the same time, establish more equitable service and financial relationships between physicians and hospitals of the Territory and the Plan. The program to be proposed by the Reorganization Committee will be reported to the Board of Directors of H.M.S.A. within the next thirty days, and, when adopted, will be the spearhead of an intensive drive which the Directors anticipate will result in an enrollment of more than 100,000 subscribers within the next year. To accomplish this objective—which is in line with expectations held for it by the medical profession as a barrier against compulsory health insurance—the Directors recognized the necessity of securing

the best available executive management to coordinate medical, hospital, and public interests.

Mr. Patterson, for a period of nine years prior to the war, occupied posts of responsibility in private corporations and governmental departments in Hawaii. Since his separation from active duty with the Navy as a full Commander, Mr. Patterson has served as one of the top executives of California Physicians' Service, one of the country's oldest and most successful prepaid medical care plans. A graduate of the University of California, he comes to the local organization with an excellent background of experience in medical economics and the business world. Much of his effort with the California Plan had to do with maintaining good relationships between the Plan and its 3,000 member physicians.

A spokesman for Hawaii Medical Service Association calls the appointment of Mr. Patterson one of the most significant developments in connection with the Plan's operation to date. He went on to urge that members of the medical profession should make an effort to become acquainted with the new Director, and discuss with him any suggestions they might have which might be helpful in making the efforts of the organization more effective.

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CALLING ATTENTION TO
Items of Possible Interest to Friends of Chauncey D. Leake

March, 1948

1. BOOKS! BOOKS! BOOKS! OSRD boys point with pride to Advances in Military Medicine, edited by E. D. Andrus & Co. (Little, Brown, Boston, '48, 2 vols., 900 pp., $12.50). J. Read interests with *Humour and Humanism in Chemistry* (Bell, London, '48, 400 pp., 21 s). R. A. Willis offers *Pathology of Tumours* (Butterworth, London, '48, 1068 pp., 63 s). R. Abderhalden discusses *Medizinische Terminologie* (Schwabe, Basel, '48, 640 pp., 32 Sw. Fr.). J. M. Hill and W. Dameshek edit *The Rh Factor* (Sp. Issue #2, *Blood*, Grune & Stratton, N.Y., '48, 198 pp., $4.25). W. F. Petersen regards *MAN, Weather, Sun* (C. C. Thomas, Springfield, Ill., '48, 800 pp., $10.50). Have you seen the attractive American Lecture Series?: G. H. Whipple, *Hemoglobin, Plasma Protein and Cell Protein* ('48, $1.40); L. T. Samuels, *Nutrition and Hormones* ('47, $1.65); C. R. Moore, *Embryonic Sex Hormones and Sexual Differentiation* ('47, $2); H. T. Karsner, *Acute Inflammation of Arteries* ('47, $0.90); E. I. DuBois, *Fever Regulation of Body Temperature* ('48, $2); W. D. Forbus, *Granulomatous Inflammation* ('48, $0.90); H. W. Magoun, *Spasticity, Stretch Reflex and Extra Pyramidal Systems* ('48, $2); I. H. Page and A. C. Corcoran, *Experimental Hypertension* ('48, $2); D. T. Smith, *Fungous Diseases of the Lungs* ('48, $2), and H. G. Wolff and S. Wolf, *Pain* (C. C. Thomas, Springfield, Ill., '48, 94 pp., $2). F. A. Beach reviews *Hormones and Behavior* (Hoeber, N.Y., '48, 382 pp., $6.50). R. T. Williams covers *Detoxication Mechanisms* (Wiley, N.Y., '48, 288 pp., $5.50). J. Alexander huffs on *Life: Its Nature and Origin* (Reinhold, N.Y., '48, 298 pp., $5).

2. PHARMACOLOGICAL, ETC.: Over a thousand abstracts appear for March *Federation Proceedings*, from B. E. Abreau & Co. on cerebral blood flow to M. Zweig & Co. on tetraethyl ammonium on gastric function (*Fed.* but little on theoretical analysis or synthesis. C. C. Pfeiffer offers interesting hypothesis on nature of spatial relationships of chemical groups required for maximal *Proc.* 7: 1-387, '48), with much Blakian representation, muscarinic action (*Science* 107: 94, Jan. 23, '48). N. P. Sullivan & Co. note slow absorption and prolonged high blood levels from injection of procaine-penicillin G. (*Science* 107: 169, Feb. 13, '48). A. Albert and R. Goldacre suggest hydrogen bonding as factor in antibacterial action of acridines (*Nature* 161: 95, Jan. 17, '48). R. Pratt & Co. show that traces of cobalt enhance penicillin action (*J. Bact.* 55: 75, '48). A. Voureka shows that penicillin resistant staphylococci become sensitive again after contact with other organisms (*Lancet* 1: 62, Jan. 10, '48). M. Block and H. M. Pollard recommend sulfathalidine for chronic ulcerative colitis (*Gastroenterol.* 10: 46, '48). J. Vaughan recommends high protein intake in anemia from trauma and sepsis (*Brit. Med. J.* 1: 36, Jan. 10, '48). Z. Z. Godlowski notes value of insulin hypoglycemia in allergic bronchial asthma is due to adrenin secretion (*Ibid,* p. 46). W. L. Lipschitz & E. Stokey find formoguanamine (5 mgs. kg.) a potent safe diuretic by mouth (*J. Pharmacol.* 92: 131, '48). G. Brownlee and S. R. M. Bushby report on chemotherapy and pharmacology of aerosperin, a more potent and selective gram negative antibiotic than streptomycin (*Lancet.* 1: 127, Jan. 24, '48). Our C. R. Allen & Co. describe variations in signs of acute oxygen want in anesthesia (*Anesth.* 8: 601, '47).

3. ETC.: Some faces should redden over C. A. Mills' report on distribution of American research funds (*Science* 107: 127, Feb. 6, '48), pointing up another factor in establishment of a provincial scientific canon, with which it is heresy (and starvation) to disagree, since the distributors of American scientific funds also control our national scientific societies and scientific journals. C. L. Walker skillfully confirms Malthus's gloomy predictions and suggests steady drive for birth control addressed to world's women as only possible escape (*Harper's* 196: 97, Feb. '48). A. S. McNalty notes influence of medicos on English poetry (*Med. Bookman* 2: 15, '48) P. S. Hench & Co. review rheumatism and arthritis reports (*Ann. Int. Med.* 28: 66, '48). E. W. Dunklin & T. T. Puck show low viability of airborne bacteria at 50% humidity (*J. Exp. Med.* 87: 87, '48). N. B. fine discussion by F. M. Burnet of basis of allergic disease (*Med. J. Austral.* 1: 29, Jan. 10, '48) and on the natural history of tuberculosis (*Ibid.* p. 57, Jan. 17, '48). J. E. P. Toman & Co. discuss electroconvulsion phenomena, finding multiple seizures on continuous stimulation (*J. Neuropath. Exp. Neurol* 7: 35, '48). M. F. Perutz shows freedom of rotation of hemoglobin molecules in red blood cells ensures high rates of oxygen reaction and diffusion (*Nature* 161: 204, Feb. 7, '48). Our A. Ruskin, O. W. Beard and R. L. Schaffer discuss blast hypertension in relation to Texas City disaster victims (*Am. J. Med.* 4: 228, '48). B. Taylor & Co. find x-rays shorten long fibrous particles of thymus nucleate (*Arch. Biochem.* 16: 19, '48).



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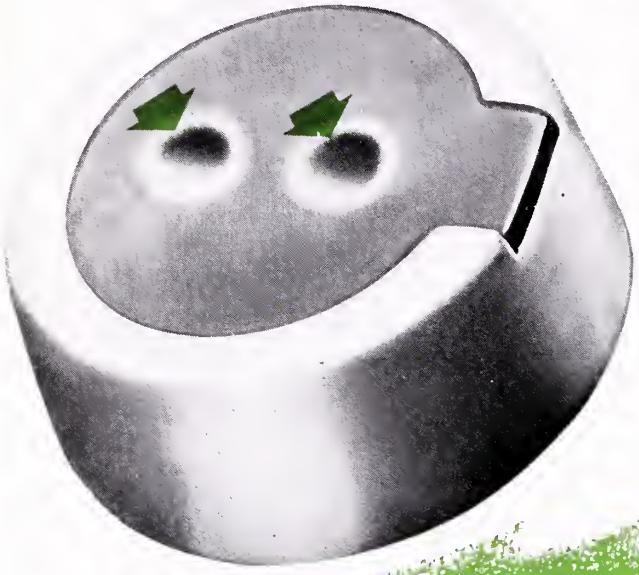
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HONOLULU, HAWAII

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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NURSES' ANNUAL CONVENTION

The dates for the annual meeting of the Nurses' Association, Territory of Hawaii have been set for September 15, 16 and 17. This change of dates to include Friday instead of Tuesday has been necessary because of other meetings at the Mabel Smyth Building. The Hawaii Public Health Association meeting will be held on September 14 just preceding the nurses' meeting.

Mrs. Arlene Thompson, Children's Hospital, Honolulu, is chairman of the program and arrangements committee. Please send your suggestions for program and arrangements as early as possible.

* * *

LICENSING OF NURSES IN THE TERRITORY OF HAWAII

In response to many requests for information regarding licensing of registered and practical nurses in the Territory, the following is presented.

Who shall be licensed?

All persons who care for the sick for compensation in the Territory of Hawaii must be licensed according to Act 240 S.L. 1947. This includes persons who practice nursing according to the definition in the Act regardless of their title or civil service classification, as follows:

a. Persons who are hired specifically for any or all of the following duties in homes, hospitals, nursing homes and other institutions under the supervision of a doctor or a nurse: Making occupied bed; bathing a bed patient; dispensing and collecting bed pans and urinals; feeding a patient; taking temperatures; doing simple dressings; transporting patients under anesthesia without assistance; giving enemas or any other treatments.

b. Persons who are hired specifically for any or all of the following duties in dispensaries, outpatient clinics or physicians' offices: Taking temperatures; applying dressings and bandages; giving medications or treatments ordered by the physician; interpreting doctor's orders to patient; caring for or accompanying postoperative patients to home or hospital.

Authority of Board: The Board for the Licensing of Nurses, Territory of Hawaii, is given authority and responsibility, according to Act 240 for determining the eligibility of such persons for licensure in the Territory of Hawaii and for granting licenses to qualified persons.

Registered Nurses

Requirements for license. To qualify for a license as a registered nurse in the Territory of Hawaii, the person must be a graduate of a school of nursing which meets the requirements of the Board for Licensing and must have successfully passed examinations approved by the Board. Each applicant for a license of registered nurse shall furnish satisfactory proof to the Board of being at least 20 years of age and in good physical and mental condition, and shall pay to the Board an application fee of $15.00.

Practical Nurses

Requirement for license. Prior to July 1, 1949 applications for a practical nurse license in the Territory of Hawaii by waiver may be made if the candidate is 18 years of age, has had six months experience and has satisfactory references from three employers or nursing supervisors who have observed his or her actual work. After the above date, however, an applicant for license as a practical nurse will be required to meet the following requirements:

1. Be 19 years old.
2. Be a graduate of a practical nurse school approved by the Board.
3. Pass an examination prescribed by the Board or furnish satisfactory evidence that he or she has been licensed as a practical nurse in another jurisdiction under laws which in the opinion of the Board maintain a standard substantially similar to those established under this chapter and who otherwise meet the standards established by the Board.

License by Examination

Time of examinations. Examinations are held in April and September each year. Announcement of the dates will be made in the newspapers of the Territory and will be sent to approved schools of nursing 90 days prior to the date set for the examinations.

Applications. Applications on blanks furnished by the Board must be filed with the Board at least 30 days before the date of the examination. Each school shall notify the Board at least 60 days before the date of the examination of the number of students expecting to take the examination at that time. The $15.00 fee must accompany the application.

Qualifications. Only graduates from schools which meet the minimum requirements of the Board for approved schools of nursing will be admitted to examinations. Students of approved schools of nursing who have completed all their major clinical practice requirements and the required class work may be admitted to examination 30 days before completing their time requirement.

Procedures for examinations. Entrance to examinations will be granted only on presentation of an official card issued by the Board to those whose applications have been approved.

Requirements for passing. To pass the examination, a grade average of 75 per cent must be obtained with no single grade below 70 per cent.

Reexamination. Professional nurse examinees shall be allowed to retake examinations in subjects which they failed at the next immediate succeeding examination. If more than two subjects are failed, the entire examination must be repeated. Failure in the second examination will require the candidate to take further study as approved by the Board. No additional fee will be required for the second and third examinations.

Notification of results. The examinee will be notified of grades as soon as possible after the examination and if she passed will be sent a certificate of license and the registration card for that year.

License Without Examination

Qualifications. The Board has the power to waive the examination of any applicant otherwise qualified, upon satisfactory proof that the applicant has been licensed as a nurse in another jurisdiction under laws which, in the opinion of the Board, maintain a standard substantially similar to that established in the Territory of Hawaii and whose individual record shows that she meets the standards established by the Board.

Application. Applications for license by reciprocity shall be made on blanks provided by the Board and shall be accompanied by the fee of $15.00, the required license fee. License without examination will be granted on the basis of the record received from the Board of Nurse Examiners of the state in which the applicant graduated and was licensed by examination. A satisfactory explanation will be required by the Board for a request for license based on license by waiver or previous reciprocity or on an examination taken in a state other than that in which the nurse graduated.

Temporary Permits

Temporary permits will be granted for a limited time to those awaiting the opportunity to take examinations or those conducting reciprocity proceedings, on presentation of the current registration card from the state in which licensed or, in case re-registration is not required in that state, upon presentation of the certificate of license in that state.

Annual Registration

Every licensed, registered or practical nurse shall between July 1, and September 1, of each year, renew his or her certificate by registering with the Board and paying a renewal fee of $1.00.

Cards will be mailed in June of each year to all nurses (professional and practical) registered in the Territory during the current year. Upon return of the card properly executed and the fee of $1.00 the registration card for the new year beginning July 1, will be mailed. Failure to re-register each year by those actively engaged in nursing constitutes a violation of the law.

* * *

WAGES, HOURS, AND PERSONNEL POLICIES

The work of the Wages, Hours, and Personnel Policies Committee of the Nurses' Association, Territory of Hawaii, is so broad that this committee has been seeking assistance from every source in order to improve working conditions for all nurses.

There is one activity which can be done only by the Nurses' Association among its own members—that is a study of prevailing wages, hours, and personnel policies in order to set up standards for the Association to adopt. This study is now under way. Questionnaires have been sent to all registered nurses in the Territory, employed or unemployed. Nurses have been requested to refrain from signing these questionnaires since the name of the nurse will make no difference in the statistics, and it has been found that more accurate information is obtained if the nurse is sure she will be anonymous. For the same reason we have asked

that the employer or place of employment be left anonymous. The only wish of the committee is to obtain a true picture of prevailing conditions.

When all of the questionnaires are returned a committee in each field of nursing named on the questionnaire will be set up to evaluate the answers and set up prevailing standards and optimum standards. The opinion of every nurse has been solicited as to the adequacy of employment standards as well as those under which she is working.

We know that we have a shifting population of nurses; we know that most salaries compare favorably with those of other professional people with a like education; we know that in some instances hours have been shortened and personnel policies have been improved. We don't know facts and figures, and we don't know what the individual nurse thinks of the whole picture. If every questionnaire is returned promptly, we soon shall know and all nurses will benefit from our findings.

WHAT COULD YOU DO IN DISASTER?
Let your Red Cross Chapter know

DO YOU KNOW that the authority under which the American Red Cross assumes responsibility for the relief of persons suffering from disaster is stated in its congressional charter:

"To continue and carry on a system of national and international relief in time of peace and to apply the same in mitigating the sufferings caused by pestilence, famine, fire, flood, and other great national calamities, and to devise and carry on measures for preventing the same."

DO YOU KNOW the Red Cross is responsible for mobilizing, organizing, and directing Red Cross medical, dental, nursing and hospital relief activities in disaster to supplement the work of public and private health agencies, physicians, and hospitals? Such supplementary assistance may include transportation of the injured, professional services of physicians, nurses, and dentists, arrangements for care in local hospitals, health supervision, and bedside nursing care in homes and hospitals.

DO YOU KNOW that cooperation is the basis upon which the American Red Cross has built its disaster relief program? There are written understandings between the American National Red Cross and the following organizations in case of disaster: American Medical Association, American Dental Association, U. S. Public Health Service sanitary engineering division, Children's Bureau, Crippled Children's Division, State and Provincial Health Officers of North America, the National Foundation for Infantile Paralysis.

DO YOU KNOW that all American Red Cross chapters throughout the United States must have disaster committees set up, including a subcommittee on Medical and Nursing with a chairman from the medical profession and a vice-chairman from the local nursing profession? The assistance which is given by Red Cross to disaster victims is given on the basis of need, not loss; is a grant, not a loan; is given on an individual family basis and is extended without political, religious, or racial discrimination.

DO YOU KNOW that last year nurses were used by the Red Cross in many disaster operations varying from apartment house fires affecting a few families to hurricanes affecting thousands?

DO YOU KNOW whether your name is on the chapter roster of disaster nurses? If your Red Cross has a chapter roster of nurses who are willing to serve in time of disaster it will be a means of saving "time" which so often means saving "lives."

NEWS OF THE COMMITTEE ON THE STRUCTURE OF NATIONAL NURSING ORGANIZATIONS*

With directives for action agreed upon by its six parent organizations and an increased budget, the Committee on the Structure of National Nursing Organizations began a new year of revitalized effort to find means to greater co-ordination in organized nursing at its annual meeting November 11-12, 1947, in New York City.

"The determination to find a middle ground upon which all six organizations can seek greater unity, manifest throughout the November meetings, promises great things for the future of organized nursing," said Hortense Hilbert, chairman of the Committee, who was unanimously re-elected following a unanimous recommendation for her re-election from the boards of six organizations which sponsor the Committee on Structure.

At the November meeting the Committee was chiefly concerned with how to get ahead with the tasks assigned to it by the boards of the six organizations, which had met jointly on November 9 and 10.

In joint meeting the six boards voted:

1. That a joint committee be continued under the name, Committee on the Structure of National Nursing Organizations.

2. That each of the six national nursing organizations have representatives on the Committee on Structure, all of whom are free to exercise voice and vote in the joint work of the Committee, and that the present numerical membership of the Committee on Structure be continued

* From the AJN, Vol. 48, No. 1, Jan. 1948.

with the addition of six members from the American Nurses' Association.

3. That the future work of the Committee on Structure be to:

a. Study and recommend effective machinery for coordination among the organizations.

b. Study and recommend further structural changes. These recommendations are to be submitted to the boards of directors of the six sponsoring organizations for approval. Reports of the Committee in original form are to be submitted to the organizations' membership along with board action regarding the Committee recommendations.

c. Release informative material directly to the membership of the organizations.

4. That the member agencies support the work of the Committee on Structure by some equitable method agreed upon, within reasonable limits of their financial capacities, and that a committee be formed of the six organizations to propose a plan, and to make suggestions for further steps to be taken to meet total budget requirements.

Each of the next six actions provided for setting up working or subcommittees of the Committee on Structure, each with equal representation from the six organizations, with the following functions:

5. To study and plan ways in which an effective organization for nursing service and education can be developed as early as possible, and to bring its plans back to the Committee.

6. To study and plan ways in which ANA may absorb the functions of the NACGN.

7. To analyze the organizational activities and functions of the various national nursing organizations as they relate to industrial nurses and industrial nursing, and to formulate recommendations leading toward unification of these interests.

8. To study and report to the Committee on Structure ways in which non-nurse membership may be provided for on a basis satisfactory to all six organizations. This motion stipulated that "in whatever organization or organizations may be established professional nurses should retain sole control over all professional matters."

9. To propose appropriate relationships between official associations of professional and practical nurse groups, now that differentiation between professional and practical nurse duties, and the functions and standards of the various nursing auxiliaries are more clearly defined.

10. To study the necessary machinery for the possible development of the nursing specialties.

The final recommendation of the Structure Committee was approved by the six boards in the abbreviated form:

11. That the Committee on Structure study experiments in coordinated action on the state and local level with a view to utilizing procedures that may have worth in the national structure.

* * *

AMERICAN NURSES' ASSOCIATION CANDIDATES FOR ANA ELECTION 1948

Election Ticket:
Officers:

President

1. Louise Baker, California. Army School of Nursing; B.S., Univeristy of Minnesota. Present position: Director of nursing service and nursing education, Children's Hospital, Los Angeles, California. Present office (national): Second vice-president, American Nurses' Association.

2. Pearl McIver, District of Columbia. University of Minnesota School of Nursing, Minneapolis; B.S., M.A., Teachers College, Columbia University, New York. Present position: Chief, Office of Public Health Nursing, Bureau of State Services, U. S. Public Health Service. Present office (national): President, American Journal of Nursing Company.

First Vice-President

1. Catherine R. Dempsey, Massachusetts. Waltham Training School for Nurses, Waltham, Massachusetts. Present position: Head Nurse, Simplex Wire & Cable Company, Cambridge, Massachusetts. Present office (national): Chairman, Industrial Nurses' Section, ANA; member, ANA Committee to Study the Implications of the Fair Labor Standards Act as These Relate to Industrial Nursing; chairman, Cambridge Nursing Council; member, Board of Directors, American Association of Industrial Nurses, Inc.

2. Janet M. Geister, Illinois. Sherman Hospital School of nursing, Elgin, Illinois. Present position: Consultant in organization. Present office (national): Chairman, Advisory Board, American Association of Industrial Nurses, Inc.

Second Vice-President

1. A. Louise Dietrich, Texas. St. John's Riverside Hospital, Yonkers, New York. Postgraduate work in public health nursing at Teachers College, Columbia University, New York. Present position: General secretary, Texas Graduate Nurses' Association. Present office (national): President, Southern Division, ANA.

2. Mrs. Bethel J. McGrath, Minnesota. Presbyterian Hospital School of Nursing, Chicago, Illinois. Present position: Director of welfare and nursing, Powers Dry Goods Company, Minneapolis, Minnesota. Present office (national): Member, ANA Committee to Study the Implications of the Fair Labor Standards Act as These Relate to Industrial Nursing; board, American Association of Industrial Nurses, Inc.; first vice-chairman, Industrial Nurses' Section, ANA.

Secretary

1. Mrs. Linnie Laird, Oregon. Chester Hospital School for Nurses, Chester, Pennsylvania; certificate in public health nursing, University of Oregon. Present position: Executive secretary, Oregon State Nurses' Association. Present office (national): Secretary of American Nurses' Association; member of ANA Committee on Relief Fund; member of ANA Special Committee to Study the ANA and Make Recommendations concerning the Relationship of the ANA to Other Agencies.

2. M. Ruth Moubray, Maryland. Maryland General Hospital, Baltimore; B.S., Teachers College, Columbia University, New York. Present position: Executive secretary and counselor, Maryland State Nurses' Association; executive secretary, Central Directory of Registered Nurses, Inc. Present office: Member, Maryland State Board of Nurse Examiners.

Treasurer

1. Lucy D. Germain, Michigan. Farrand Training School for Nurses, Harper Hospital, Detroit, Michigan; B.S., Teachers College, Columbia University, New York; M.A., University of Michigan. Present position: Director, School of Nursing and Nursing Service, Harper

Hospital. Present office (national): Member, Advisory Committee, Joint Orthopedic Nursing Advisory Service.

2. Agnes Ohlson, Connecticut. Peter Bent Brigham Hospital School of Nursing, Boston, Massachusetts; B.S., Teachers College, Columbia University, New York. Present position: Secretary and educational director, Connecticut State League of Nursing Education; president, Connecticut State Nurses' Association. Present office (national): Chairman, ANA Committee for the Bureau of State Boards of Nurse Examiners.

Directors*

1. Mrs. Myrtle C. Applegate, Kentucky. Methodist Deaconess Hospital, Louisville, Kentucky. Present position: Nurse consultant, Jefferson County Welfare Department, Louisville, Kentucky. Present office (national): Secretary, Southern Division, ANA; chairman, ANA Committee on Nominations.

2. Mrs. Margaret M. Jones, Maine. State Street Hospital, Portland, Maine (now discontinued). Present position: inactive. Present office (national); Member, ANA Committee on the structure Study, Committee on the Structure of National Nursing Organizations, ANA Committee on Nominations, ANA Committee on Program 1948 Biennial Convention.

3. Mrs. Estelle Riddle Osborne, New York. Homer G. Phillips School of Nursing, St. Louis, Missouri; B.S. and M.A., Teachers College, Columbia University, New York. Present position: Instructor, New York University, New York. Present office (national): Member, NOPHN Committee on Education; Member, Committee on the Structure of National Nursing Organizations.

4. Mrs. Elizabeth K. Porter, Pennsylvania. Western Pennsylvania Hospital, Pittsburgh, Penn.; B.S., Columbia University, New York; graduate study, Western Reserve University, Cleveland; Ed.D., University of Penn., Philadelphia. Present position: Professor of Nursing Education, University of Pennsylvania. Present offices (state and national); Chairman, Economic Security Committee, Pennsylvania State Nurses' Association; Member, Board of Directors, Philadelphia League of Nursing Education and the Nursing Council of Metropolitan Philadelphia; Chairman, NLNE Committee on Postgraduate Clinical Nursing Courses; NLNE member on Joint Committee on Postgraduate Nursing Education; consultant on Economic Security Program, ANA; Member, ANA Committee on Employment Conditions of Registered Nurses.

5. Nina E. Wootton, Tennessee. Nashville General Hospital, Nashville, Tennessee; B.S., George Peabody College for Teachers. Present position: Director of nursing education and secretary, Board of Nurse Examiners, Tennessee. Present office (national); Member, ANA Committee for the Bureau of State Boards of Nurse Examiners.

Committee on Nominations:
F. Ruth Kahl, District of Columbia
Mrs. Edith M. Partridge, Wisconsin
Mrs. Mary S. Tschudin, Washington
Mrs. Edna Viets, Ohio
Mrs. John E. Williams, North Dakota
Kathleen F. Young, Michigan

For complete biographies of candidates for offices and members of the Committee on Nominations, see your American Journal of Nursing.

* Since the ANA Committee on nominations presented its report, Miss Ruth B. Freeman has withdrawn her name as a candidate for director. The vacancy will be filled by having additional nominations made from the floor.

Although the article referred to in the editorial pages of AJN for January 1948 was published in November 1947, the agitation it aroused is still occupying the time and thoughts of a great many individuals. Those who have not read the article should do so by all means. It has recently appeared as a reprint in RN.

The editorial excerpt to follow is for the benefit of those who might also have missed AJN.

BEDSIDE NURSING IN OUR TIME*

Gretta Palmer's corrosive article in the *Ladies' Home Journal* set us thinking about the despair of many nurses who have told us that it is not possible to *nurse* patients under the conditions prevailing in many hospitals. They know, as did Miss Nightingale, that "The art of nursing is that of nursing the sick, not nursing the sickness."

Professor Koos went to the heart of this problem in this magazine last May. He wrote:

"As medicine has become a technical rather than an intuitive science, the individual has become more and more a group of systems composed of organs, each of which must have specialist's consideration. The physician has become a clinician, and one who is tied tightly to his office equipment and to his hospital affiliation. This has become so much a truth that the city dweller, at least, must search diligently for a physician who will make home visits. This is not a castigation of the physician, but it is a statement of fact. The end result is impersonalized medical care, and that result is to be regretted.

"This impersonalization of medical care is exactly contrary to what the times demand, for as our social order becomes ever more complicated and more frustrating, personal problems become more real and affecting in our lives."

It cannot be denied that impersonalization of medicine has had an unwholesome influence on nursing. Neither can it be denied that for some years leadership in nursing was so concerned with the effort to keep up with demands for more nurses that major emphasis was placed on preparation for teaching and administration in nursing schools and on the preparation of public health nurses. Critics appear to believe that this was due to a concentrated effort to avoid giving nursing care. Since 1943, however, the NLNE has stressed preparation for clinical competence.

The great majority of nurses are bedside nurses. Visiting nurses give bedside nursing care to many more thousands of patients than could possibly be given full-time care. Private duty and hospital staff nurses are the two largest groups of nurses in the profession. Both fields have been financial blind alleys with no material reward for superior work. Even this fact, coupled with the impersonalization of medicine of which Dr. Koos has

* Am. J. Nursing 48:3 (Jan.) 1948.

written, has not driven many nurses out of nursing. But skillful nurses have given up the type of nursing they loved because they could not meet their personal and family obligations on the minimum salaries accorded bedside nurses. One of them wrote, quite recently:

"I've spent eight thoroughly satisfying years working in the wards of hospitals. The memory of the hours with sick and injured patients can never be erased. Many lasting friendships with members of patients' families began at the bedside of a patient with an oxygen tent, or transfusion apparatus, or a little knot of anxious relatives as a background. Having friends of many creeds and nationalities helps me to understand the American interpretation of democracy."

Nursing need not adopt the impersonalization attributed to medicine. As a matter of fact, the profession began posting signs on the professional highway some years ago which point the way to more satisfying nursing practice.

* * *

HAWAII NEWS

Mary E. Stanley*

Over 50 members and friends attended the Annual Banquet of the Hawaii County Nurses' Association on February 2, 1948. An excellent dinner was enjoyed at the Hilo Hotel followed by a social evening at the Hilo Memorial Nurses' Cottage.

At the March meeting the Association voted to donate $200 to the Jane Service Memorial Fund.

Many nurses are planning to attend the Florence Nightingale Services in Kona on May 9, 1948. The Kona nurses have had a special service for several years on the Sunday nearest to Florence Nightingale day, May 12. After church services luncheon will be served at Kona Inn. Miss Josephine Hall, Public Health Nurse in the Kona District, assures everyone a good time.

Miss Roberta Lindberg, Superintendent of Nurses at Hilo Memorial Hospital, has just returned from California where she has been visiting her family.

Miss Eleanor Syrup, nurse at Ookala Plantation Hospital, will leave very soon for a four months vacation on the mainland.

* * *

ST. FRANCIS HOSPITAL, HONOLULU

The following nurses, recently graduated from St. Francis Hospital School of Nursing, have now joined the hospital staff.

Miss Kay Koshiyama
Miss Yuriko Sakihara
Miss Magdalene Y. Matsumura
Miss Joyce Hirashiki
Miss Sadako Muramoto
Miss Sadako Higa
Miss Sumie Fukuda
Miss Judith Yamada
Miss Elsie Inukai
Miss Daisy Kaku
Miss June Hasegawa
Miss Alice Gomi

Other new members of the hospital staff are:

Mrs. Virginia Willhite, St. Joseph's Hospital School of Nursing

Miss Mary E. Brown, Knapp College of Nursing, California

Mrs. Olga K. Tracy has joined the anesthetic staff of St. Francis after spending one year at the Presbyterian Hospital, Newark, New Jersey.

Miss Mary Cannon, who has been on the surgery staff as supervisor for three years, returned to the mainland in March. Her successor is Mrs. Marjorie Higgins, a graduate of Waldo County General Hospital, Belfast, Maine, with postgraduate study in operating room technique at Bellevue Hospital, New York.

The pediatric unit of 20 beds is now ready. Half of the students will receive their training here, and the other half at St. Mary's Hospital, St. Louis, Missouri.

Miss Norma Fisher, staff nurse, St. Francis Hospital, was a delegate to the Economic Security Conference being held in San Francisco, April 7 to 12. This conference, sponsored by ANA, considered wages, hours, and personnel policies. Watch for Miss Fisher's report in the Bulletin.

* * *

CITY AND COUNTY NURSES' ASSOCIATION, HONOLULU

President Laura Draper has announced the following standing committees for the Association for 1948:

Program
- Myrna Campbell, Chairman
- Etta Hou
- Angela Carlucci
- Elsie Park
- Dorothy Smithson

Nominating
- Erma Burgess
- Edith Von Driska
- Jean Machichida
- Dorothy Rish
- Elsie Ho, Secretary

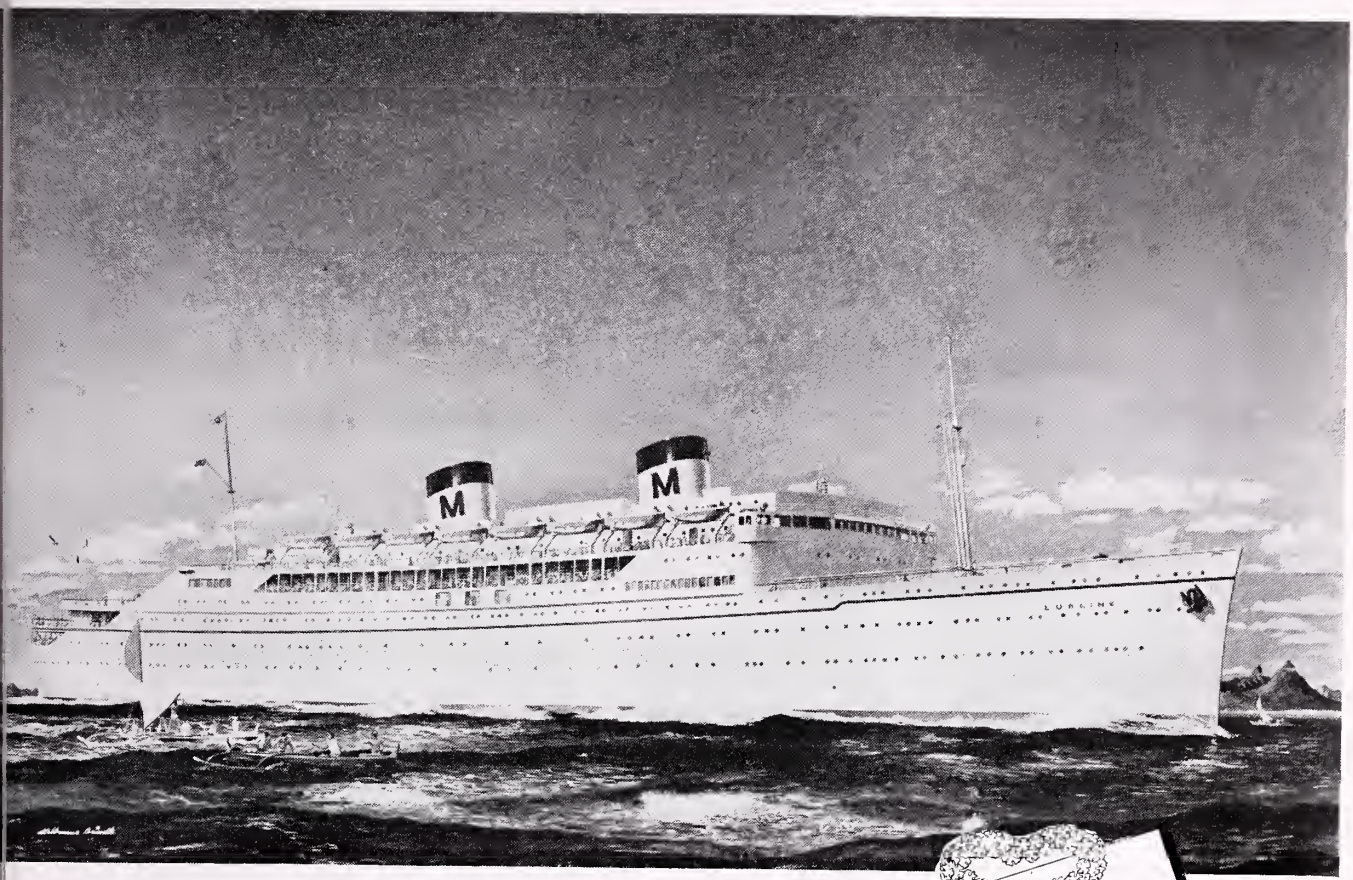
Finance
- Violet Buchanan, Chairman
- Marion Sanford
- Mrs. Amelia Garcia
- Esther Kekala, Treasurer

By-Laws
- Helen Gage
- Mary Nailau
- Charlotte Kerr
- Elsie Ho, Secretary

Arrangements
- May Bowron, Chairman
- Alice Arnold
- Laura Hooker
- Martha Rothwell
- Miyoko Okahato

Blood Bank
- Clara Bellevue, Chairman
- Sadie Ching
- Ruth Thurman
- Edith Von Driska

* Staff nurse, Puumaile Hospital



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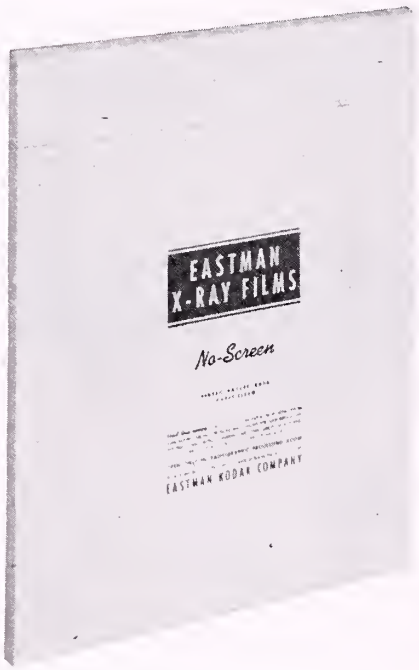
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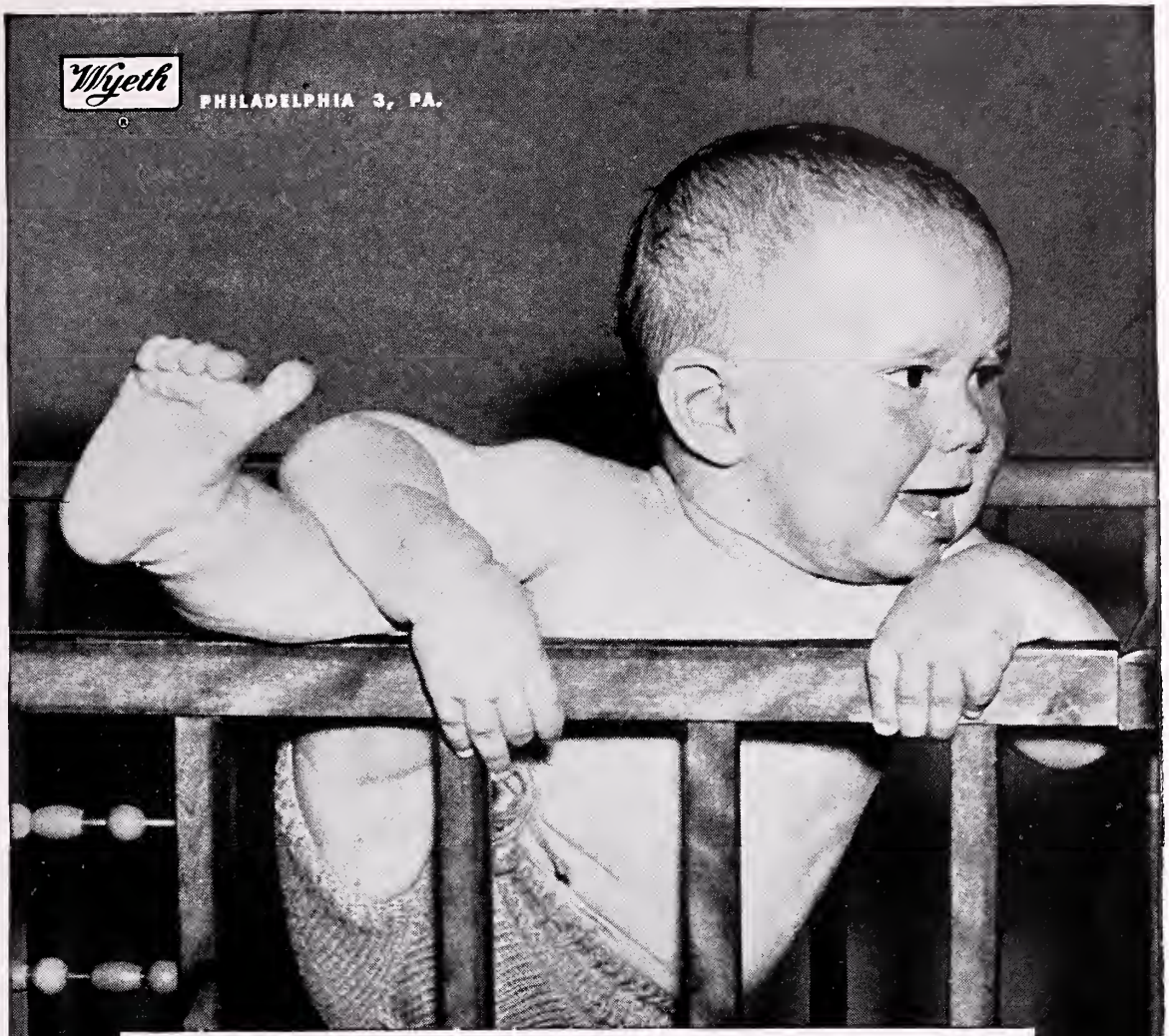
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S-M-A closely approximates mother's milk.

The S-M-A formula is well suited to modification, as the physician may wish, for special feeding problems.



THIS SUGGESTION MAY BE OF VALUE FOR YOUR THROAT PATIENTS:

When cigarette smoking is a factor in throat irritation, many leading nose and throat specialists suggest* to their patients a choice of 3 alternatives:

1. Stop Smoking,
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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

The advice is always "SEE YOUR DOCTOR"

To an audience of over 23 million people, in LIFE and other national magazines, Parke, Davis & Co. presents the message shown below. This is the 211th advertisement in the campaign in behalf of the medical profession, published continuously since 1928.

A reproduction in full color will be sent on request. Write Parke, Davis & Company, Detroit 32, Mich.

Some things you should know about reducing your weight

No. 211 in a series of messages from Parke, Davis & Co. on the importance of prompt and proper medical care.



It is an accepted medical fact that excess weight can impair your health and efficiency, and possibly shorten your life.

One person's proper weight may be quite different from another's, however—even though their height and age are approximately the same. A large-boned, muscular person, for instance, should weigh considerably more than a small-boned person of the same height and age.

How much you should weigh is something to leave up to your doctor. Only your doctor can accurately judge whether your weight is within normal limits, or whether a loss or gain in weight is medically advisable.

If your doctor tells you that you weigh more than you should, it's just good sense to do something about it under his supervision. *To undertake a weight-reducing program without proper medical guidance is a foolish, and often dangerous, thing to do.*

It would be pleasant if there were some simple pill which would automatically and safely reduce your weight with no effort on your part. Unfortunately, *no such remedy exists.* So-called "reducing pills," taken without a physician's advice, are usually valueless and may be dangerous.

One type of pill, for instance, will cause you to lose weight—but only for a day or two! Its action is to remove water from body tissues, thus lowering your weight. But as soon as the water is replaced, the extra pounds are back again.

Another thing to beware of, in an effort to lose weight, is any sort of faddist diet.

A liquid diet may often be just as fattening as a normal one. A diet which concentrates on a particular food, and excludes most other foods, may deprive you of nutritive elements essential to the maintenance of good health.

SEE YOUR DOCTOR. Let him decide whether you should lose weight, how much you should lose, and how quickly. Let him tell you how you can do it without starving yourself, without risking your health. He can recommend a well-balanced diet. He can advise you about exercise. If he thinks medication will be helpful in your case, follow his instructions about dosage *exactly.* His advice is the only advice you can trust in matters that concern your health.

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smaller dosage

treatment of inflammatory enteric diseases

'SULFATHALIDINE' *phthalylsulfathiazole*, developed by the Medical Research Division of Sharp & Dohme for treatment of inflammatory conditions of the intestine, is clinically nontoxic and effective in *smaller dosage* . . . 0.05 gm. to 0.1 gm. per kilogram of body weight daily. • 'SULFATHALIDINE' *phthalylsulfathiazole* maintains a high bacteriostatic concentration in the gastrointestinal tract, markedly alters the bacterial flora, and profoundly reduces Escherichia coli, clostridia and related organisms. Moreover, 'SULFATHALIDINE' *phthalylsulfathiazole* is effective even in the presence of a watery diarrhea. • Administered recently to 100 patients with inflammatory diseases of the intestine, 'SULFATHALIDINE' *phthalylsulfathiazole* was effective in the treatment of 90.* The clinician reported:

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*J. A. M. A. 129:1080. December 15, 1945.

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*Based on averoge reported values for milk.

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AMNIOTIN, Squibb complex of natural mixed estrogens, does *more* than relieve climacteric flushes and sweating. The patient not only experiences a feeling of well-being, but increased strength and vigor and "a greater sense of general relief, exclusive of the amelioration of hot flashes."[2] These advantages, long attributed to natural estrogens, are attained with Amniotin therapy.

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Whether symptoms are mild, moderate or severe, oral and intramuscular forms of Amniotin in a variety of potencies fulfill every need. Capsule suppositories are also available.

BIBLIOGRAPHY:

1. *Texas State J. Med.* 52:683 *(Apr.)* 1947.
2. *J. Clin. Endo.* 3:89 *(Feb.)* 1943.
3. *J.A.M.A.* 134:1141 *(July 26)* 1947.

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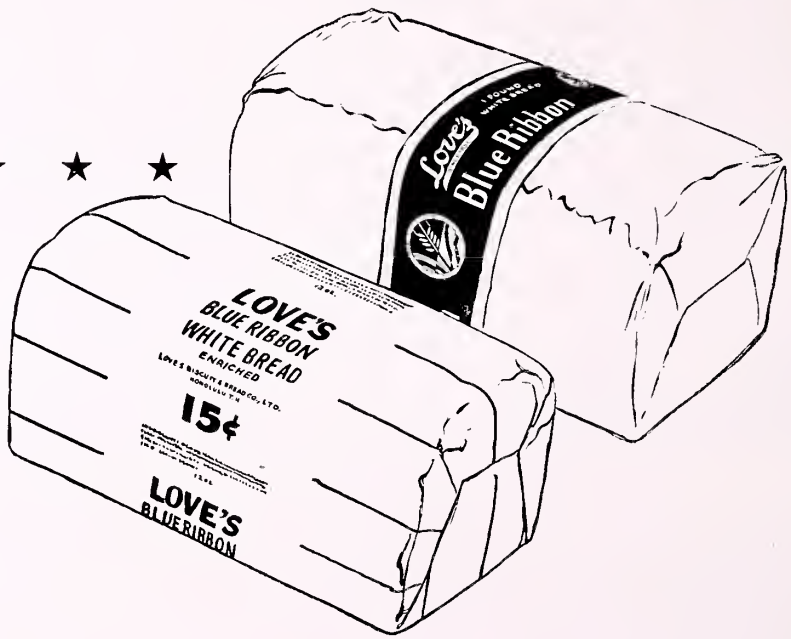
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1. Dunn, H. L.: Am. J. Pub. Health 36:1412 (Dec.) 1946.

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Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available Carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association.

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(A) The right man might not happen along for some time.

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So we urge all working girls—if you're not buying U.S. Savings Bonds on a Payroll Plan, *get started now.*

It's an easy, painless, and automatic way to set aside money for the future. In ten years, you'll get back $4 for every $3 you put in.

Remember, girls—having money of your own may not make you *more* attractive, but it certainly won't make you *less!*

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and other Manifestations of

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The following episodes may be prevented by appropriately regulated administration of a vasodilator having a *sustained* effect:

FOR THE PERSON

- *who is compelled to stop and rest when climbing a flight of stairs.*
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- *who is stricken with precordial pain on unusual exertion or emotion, or when exposed to cold.*

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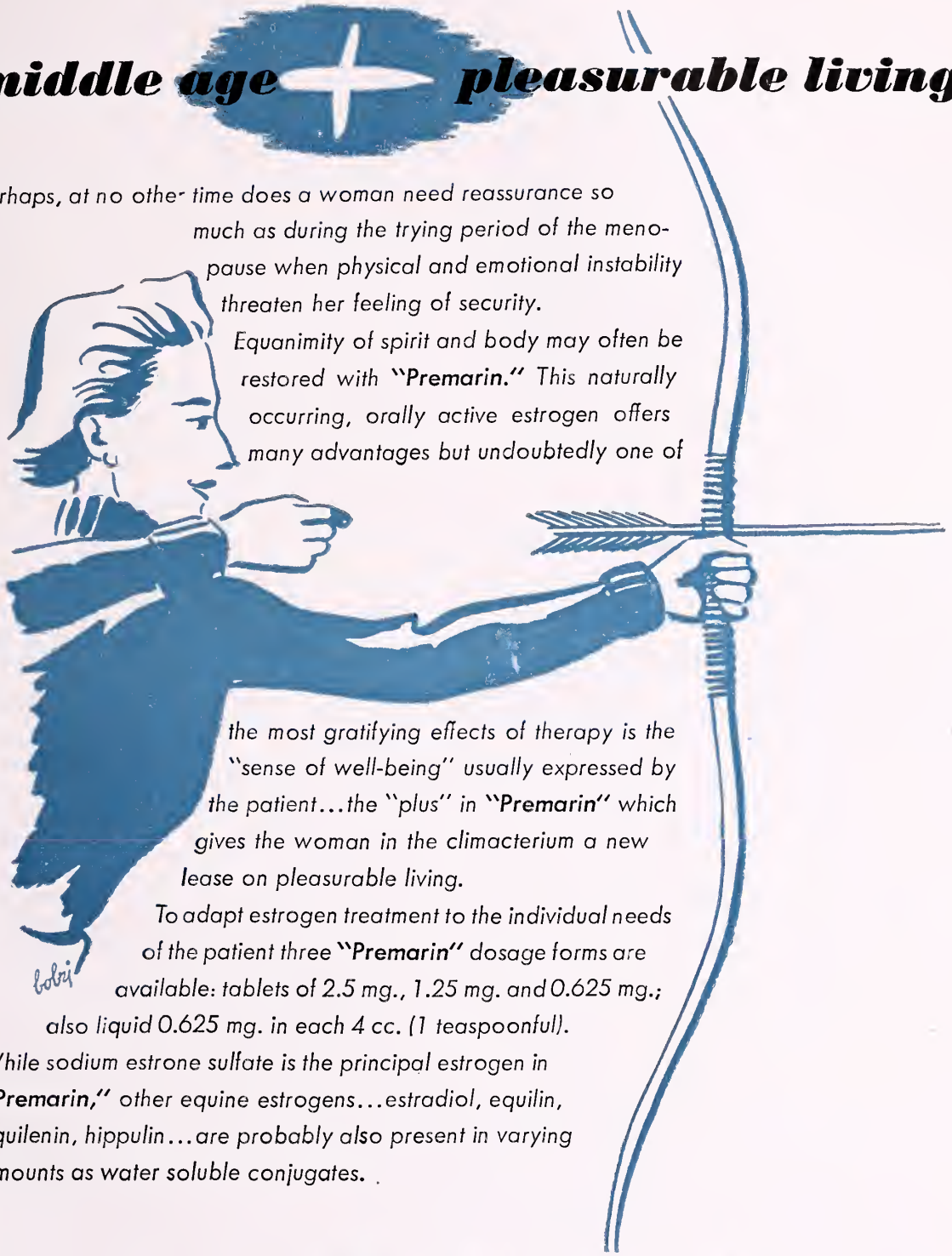
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Perhaps, at no other time does a woman need reassurance so much as during the trying period of the menopause when physical and emotional instability threaten her feeling of security.

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To adapt estrogen treatment to the individual needs of the patient three **"Premarin"** *dosage forms are available: tablets of 2.5 mg., 1.25 mg. and 0.625 mg.; also liquid 0.625 mg. in each 4 cc. (1 teaspoonful).*

While sodium estrone sulfate is the principal estrogen in **"Premarin,"** *other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water soluble conjugates.*

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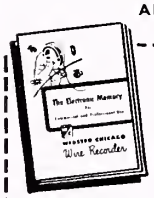
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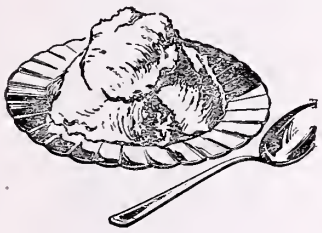
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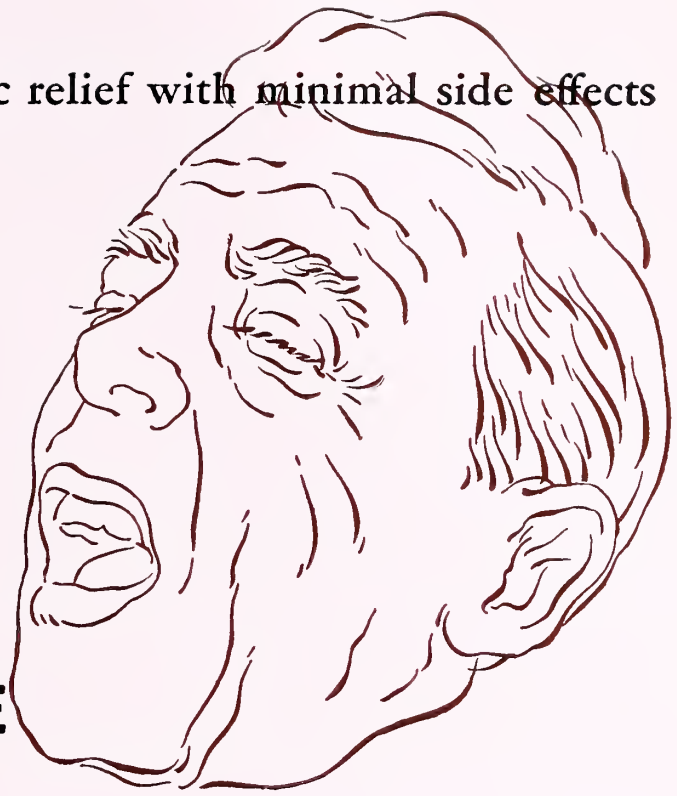
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1. Arbesman, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.
2. Loveless, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.
3. Bernstein, Rose and Feinberg: *Ill. Med. Jl.*, 92: 2, 1947.
4. Osborne, Jordon and Rausch: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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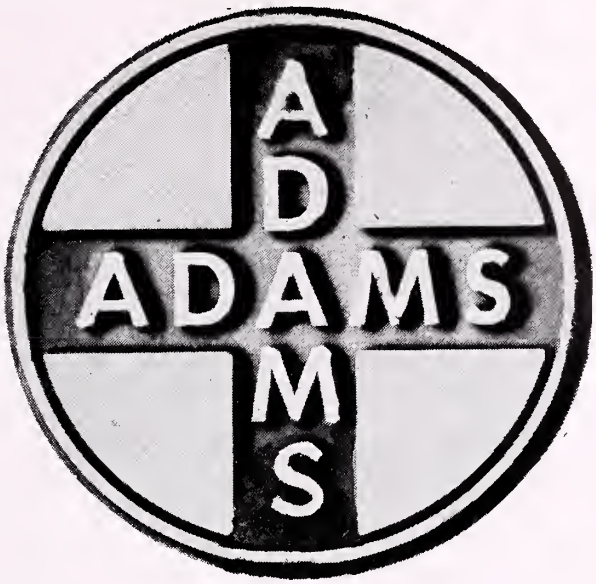
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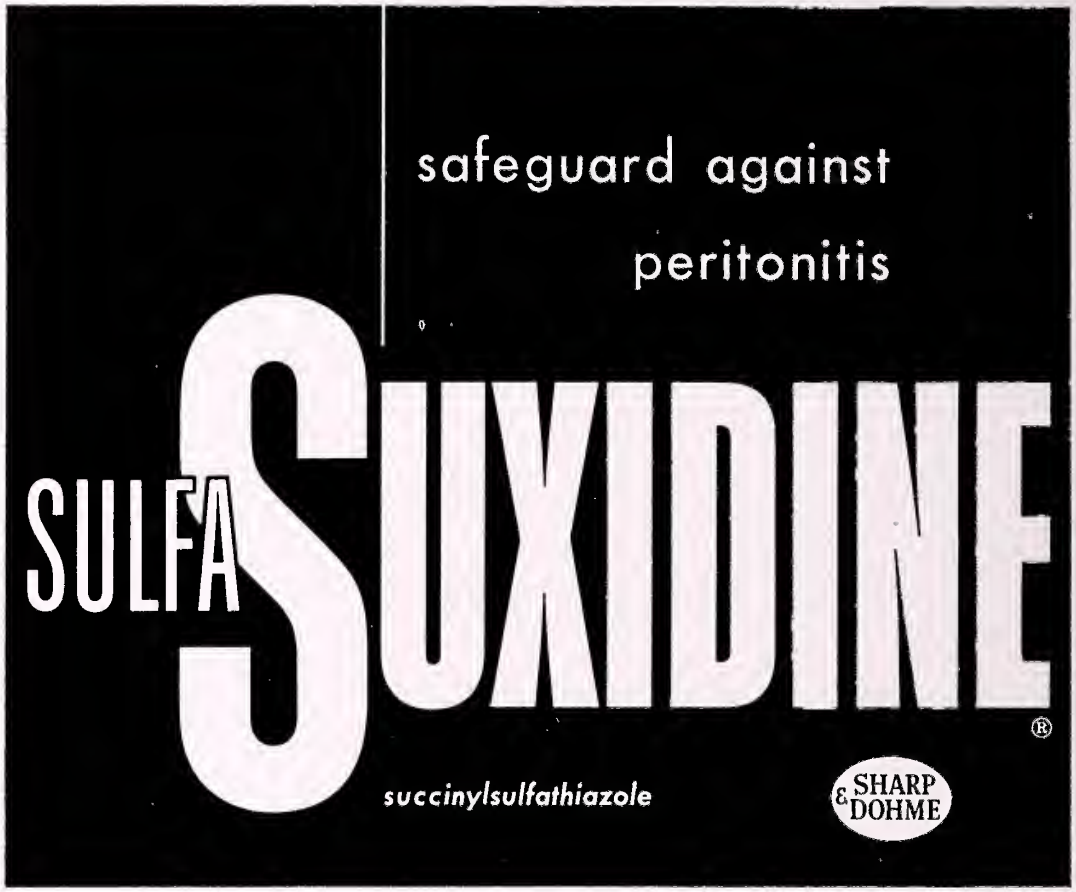
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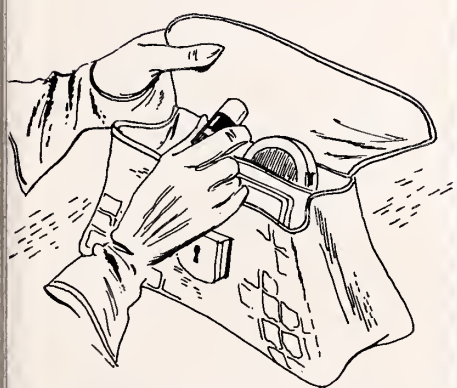
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1. Int. Abst. Surg. 83:1, 1946.
2. Am. J. Obs. & Gyn., 49:114, 1945.

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"The Bends"

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The Epidemiological Significance of the Behavior of Poliomyelitis in Warmer Climates

W. LLOYD AYCOCK, M.D.*

In choosing a subject for presentation to the Hawaii Territorial Medical Association, I realize that the most insistent demand upon the doctor is for the diagnosis and treatment of poliomyelitis. It was not so long ago that only frankly paralyzed cases were recognized, or when even these were submerged with the accepted but neglected "crippled and deformed." By methods familiar to all, the threshold of clinical recognition has been raised to include mild and nonparalytic forms of the disease, and the majority of patients are now kept usefully ambulatory by the orthopedic correction or prevention of what might be called "secondary crippling"—contractures and deformities occurring as a consequence of the paralysis itself. But from the very nature of the disease, it can hardly be expected that advances in these two lines can ever constitute a solution of the poliomyelitis problem. It is now quite clear that the larger proportion of individuals who become infected with the virus and who play the larger part in its dissemination cannot be identified in any way which would make practical any of the ordinary methods of bringing the spread of virus under control. In spite of the fact that systems of therapy have been heralded which have gone so far, perhaps in wishful thinking, as to deny the very existence of flaccid paralysis, it would seem to be equally clear that satisfactory therapy is not in prospect for a lesion which involves destruction of motor cells of the anterior horn.

It is for these reasons that in seeking a way out, we turn to the question why anterior horn damage and paralysis occur as an exceptional manifestation of an infection with a virus, the most frequent result of which may be only a trivial febrile upset or no symptoms at all. Another reason for our subject is that in Hawaii the occurrence of the frank form of the disease in a pattern distinct from that seen on the mainland presents, I believe, a highly suitable field for study of this question, both by reason of Hawaii's climate and because of the distinctive racial composition of its population.

Reports of cases of poliomyelitis from tropical regions and from the Orient are likely to contain an excessive proportion of Europeans or Americans who not infrequently contract their disease while on even brief visits to these localities. This observation is remindful of the well known epidemiologic principle that outsiders coming into endemic or seeded areas are, by reason of lack of immunity from any previous exposure, more liable to attack than residents. But there is this important reversal: here the "outsiders" have come not from areas where the disease is less, but from areas where it is *more,* prevalent. Furthermore, the age of these patients is as a rule distinctly higher than that of native patients. An example is the report by Taylor on poliomyelitis occurring on the Isthmus of Panama from 1904 to 1942.[1] In conformity with many instances of this particular behavior of the disease, the occurrences of poliomyelitis in British, American and Australian troops in the Middle East, Philippine Islands and in China and Japan, and in larger numbers,[2] have brought the phenomenon to the attention of a number of observers, made it the subject of considerable study, and as well, the basis of far-reaching generalizations concerning the epidemiology of the disease.[3] The apparent immediate cause of the phenomenon is a more frequent immunity in natives (developing earlier in life as a result of exposure to the virus in individuals while probably still under the protection of maternal passive immunity). On the one side the areas where the phenomenon has been observed include many with poorer sanitation. On the other side, reasons are seen by some for believing that poliomyelitis in temperate climates may have changed from a sporadic to an epidemic disease in the last fifty or sixty years, supposedly coincidentally with the improving of sanitation. These considerations, coupled with the presence of the virus in intestinal discharges, so much emphasized in recent years, have led to the formulation by some of the tenet that "poliomyelitis is the price we pay for sanitation." In addition to its inference with respect to the mode of spread of the virus, this all implies that the disease in temperate climates in presanitation days behaved

* Associate Professor of Preventive Medicine & Hygiene, Harvard Medical School. Boston, Mass.

Written in collaboration with J. R. Enright, M.D., Chief, Bureau of Epidemiology, and C. L. Wilbar, Jr., M.D., President, Board of Health, Territory of Hawaii, Honolulu, T. H.

Read before the Fifty-eighth Annual Meeting of the Hawaii Territorial Medical Association, May 6, 1948.

[1] Taylor, C. E.: Poliomyelitis on Isthmus of Panama, New Eng. J. of Med. 230:790 (June 29) 1944.

[2] Sabin, A. B.: The Epidemiology of Poliomyelitis, J.A.M.A. 134:749 (June 28) 1947.

[3] Paul, J. R.: Poliomyelitis in Japan, Am. J. Hyg. 45:206 (March) 1947.

as it does now in the tropics. It also implies an all too perfect correlation between climate and improved sanitation all the way from Tasmania to Greenland.

Before deciding that man-made sanitation is responsible for such a difference in the behavior of the disease in different climates and has produced such a quick change from sporadic to epidemic occurrence in temperate climates, and before accepting these accompanying implications, it would be well to examine the record of the occurrence of the disease in point of time (also man-made) upon which the idea is based. Comparisons should be made with other diseases which exhibit the same differences in warmer and cooler climates—and in which the various elements involved are more amendable to measurement. Finally, it is necessary to seek an explanation which would apply not to just one of its members, and with a large element of doubt, but with more certainty to all of a group of diseases which exhibit the identical phenomenon.

Change from Sporadic to Epidemic?

That a disease is "on the increase" is one of the most difficult of epidemiologic features to establish. It would be difficult today, for example, to make any comparison between the actual incidence of appendicitis in the periods before and after Reginald Fitz.

Indications of poliomyelitis can now be traced to the earliest times in the records and preserved remains of human history, but in medical literature it was not until the beginning of the nineteenth century that it began to emerge as a disease entity from the heterogenous group of accepted but little noticed "crippled and deformed." It was through descriptions of a particular kind of crippling, which included some attempted association with one or another specific cause, that the concept of an epidemic infectious disease began to take form. Underwood's "Debility of the Lower Extremities" is generally regarded as the first of these, which with subsequent more definitive descriptions foreshadowed Heine's monograph in 1840. Although dealing primarily with the orthopedic management of the various paralyses, Heine included the clinical course as well as his speculations on the etiology and pathology of the disease. He called it an affection of the "central nervous system, namely of the spinal cord, of an irritative and congestive sort"—good beginnings for the present day knowledge. Strumpell in 1884 first suggested infection. In 1887 Medin observed the epidemic nature of the disease in Stockholm, and in 1894 Caverly studied an outbreak in Vermont, added non-paralytic forms of the disease, and laid down the important epidemiological features.[4] And, finally, the exhaustive studies of the 1905 epidemic in Sweden by Wickman carried this earlier work on to the concept that the infectious agent was widespread, largely through mild, abortive, or subclinical infections and with the frank disease an exceptional outcome of exposure to the infectious agent.

Hirsch had to write in 1880 that "Historical inquiry . . . into the relations of typhoid in time and place can only cover a somewhat short period with any exactness, a period counted by tens of years." If typhus abdominalis fades into an undifferentiated group so quickly when we try to trace it back, when we ourselves can remember cases of poliomyelitis which had not yet been separated from "the crippled and deformed," it is no wonder that records of epidemics of poliomyelitis can be traced no further back than those of typhoid fever. One can judge that the papers of Jacobi (Mary Putnam) [5] and Sinkler [6] in Philadelphia in the Seventies, describing as they did all the types of cases seen today, certainly represented an experience with far more than a "sporadic" occurrence of poliomyelitis. Heine's monograph in 1840 indicates a familiarity with various types of cases equal to that of the orthopedic surgeon of the present day. Colmer's epidemic of poliomyelitis in 1842 in the Parish of West Feliciana in Louisiana was a large epidemic for that population; and Underwood in 1789 was not describing a rare experience in his "debility of the lower extremities" when he wrote that when one leg was affected, his treatment entirely removed the complaint, "but when both have been paralytic, nothing has seemed to do any good but irons to the legs."

Age Distribution

The age distribution of "the immunizing infections of childhood" is a reflection of both opportunity for exposure and immunity from previous exposure. One determinant in the rapidity and extent of exposure, and the development of immunity from exposure, is density of population. The most obvious example of this is the occurrence of measles at younger ages in urban populations than in rural populations in the same region. Clinical observation alone has been sufficient to establish measles as one of the "immunizing infections of childhood" without benefit of either tests for detection of virus or tests

[4] Caverly, C. S.: Preliminary Report of An Epidemic of Paralytic Disease Occurring in Vermont, in the Summer of 1894, Yale Med. J. 1:1 1894; Notes of An Epidemic of Acute Anterior Poliomyelitis, J.A.M.A. 26:1, 1896.

[5] Jacobi, M. P.: Pathogeny of Infantile Paralysis, Am. J. Obst. 7:1, 1874.

[6] Sinkler, W.: On The Palsies of Children, Am. J. Med. Sci. 69:348 (April) 1875.

for immunity resulting from infection. If only cases of measles with complications such as middle ear, pneumonia, or post-measles encephalitis, were recognized, the distribution of "measles" would only dimly reflect the dissemination of the virus and could not be fitted into any epidemiologic pattern in the absence of tests for virus or for immunity. The conception of the epidemiology of measles would be as vulnerable to challenge as has been the epidemiology of a disease where infection and the development of immunity is largely subclinical. Both Frost and Wenstedt many years ago interpreted the age distribution of poliomyelitis, and especially the more rapid decline in cases with increase in age, and in urban than in rural populations, as indicative of widespread subclinical immunity which accumulated more rapidly in urban than in rural populations. From a comparison of the age distribution of measles, diphtheria, and poliomyelitis in urban and rural populations, it has been estimated that the virus of poliomyelitis attains a distribution equal to that of measles and diphtheria, and it was inferred that the mechanism of infection was the same for the three diseases, the essential epidemiologic difference being the frequency with which those exposed to the infectious agents developed clinical disease or subclinical infection. In diphtheria subclinical infection is roughly ten times that of clinical infection, and in poliomyelitis more than a hundred times as great.[7]

In warmer climates even less densely populated, the age distribution of certain of these diseases, notwithstanding lower incidence, indicates that dissemination of their infectious agents with resulting immunity takes place more rapidly and extensively with reference to age than in cooler climates. Doull has shown that in diphtheria, scarlet fever and poliomyelitis there is a higher concentration of cases at younger ages in tropical and sub-tropical than in cold climates, a phenomenon interpreted by him as an indication of earlier and more widespread immunity in warmer climates. As he said, subclinical infection is regarded as being more frequent in these climates than in colder latitudes where clinical forms are much more common.[8]

It was observed in 1929 that in spite of lower incidence of poliomyelitis in the southern States, the age distribution indicated "that immunization, as in diphtheria, is accomplished . . . with a rapidity equal to that in the North; this may in turn be regarded as evidence that the virus spreads to the same extent in the two parts of the country. It should be remarked that the close approximation between the age distribution in New York City and in the southern States, the latter comprising a comparatively rural population, suggests that the virus may spread with even greater rapidity in the South from the point of view of age, and that the possibility of infection with the virus earlier in life in the South may be a factor in the production of the relatively more extensive subclinical immunization in the Southern population. It should be stated, however, that there is no positive evidence that infection at earlier ages *per se* tends to produce subclinical immunity, excepting (by analogy with measles and diphtheria) possibly during the first few months of life, when there may be a temporary immunity derived from an immune mother, which, if infection occurs during this short period, might bring about an active subclinical immunity.[9]

Thus, insofar as age distribution may be taken as a reflection of the rapidity and extent of virus dissemination, it would appear that the mechanism of dissemination (and immunization) are the same in all of a group of diseases including diphtheria, scarlet fever, and poliomyelitis, and that all three diseases exhibit the same evidence of earlier exposure in warmer than in cooler climates.

Immunity

The epidemiologic inferences from studies of the age distribution of these diseases in respect to widespread dissemination and immunization (more largely subclinical, as so ably set forth by Wickman in his classic monograph on poliomyelitis) have been amply borne out by actual tests for immunity. Many Schick test surveys in urban populations have revealed immunity to diphtheria which increases with age to the degree which was fully to be expected from the decrease in incidence of the disease with age. The less rapid development of immunity and to a lower total level than that observed in urban populations has been determined by Schick test surveys in rural populations, notably the study of Kidder in Vermont.[10] Extensive Schick test surveys in a number of tropical countries where clinical diphtheria is relatively uncommon, have consistently shown higher proportions of immunes than are found in even more congested populations in northern areas.[11]

[7] Aycock, W. L.: The Significance of the Age Distribution of Poliomyelitis; Evidence of Transmission through Contact, Am. J. Hyg. 8:35 (Jan.) 1928.

[8] Doull, J. A.: Variations in Age Distributions of Mortality and Morbidity from Diphtheria, Scarlet Fever and Certain Other Diseases in Relation to Latitude, Am. J. Hyg. 8:633 (July) 1928.

[9] Aycock, W. L.: Study of Significance of Geographic and Seasonal Variations in Incidence of Poliomyelitis, J. Prev. Med. 3:245 (May) 1929.

[10] Kidder, C. W.: Schick Tests and Immunization Against Diphtheria in 8th Sanitary District of Vermont, Pub. Health Rep. 38:663 (March 30) 1923.

[11] Doull,[8] Doull *et al.*[12]

[12] Doull, J. A.; Ferreira, M. J., and Parreira, D.: Results of Schick and Dick Tests in Rio de Janeiro, J. Prev. Med. 1:513 (Nov.) 1927.

Tests for immunity to poliomyelitis, although carried out far less extensively than tests for immunity to diphtheria, have been done to a sufficient extent to indicate a similar population immunity. Neutralization tests on persons at different age groups in urban and rural populations revealed immunity corresponding closely to that to diphtheria.[13] Numbers of tests done in various parts of the world have indicated immunity in adults as extensive as immunity to diphtheria. In warmer climates, twenty of twenty-one adults in Atlanta, Georgia, possessed neutralizing antibodies.[14] A high proportion of sera from the Fiji Islands neutralized the virus.[15] It is to be noted that the extent of immunity in adults in warmer climates is equal to, or exceeds, that of adults in more temperate climates. Doull, Hudson, and Hahn, testing adults of the Philippine Islands, found evidence of immunity to diphtheria, scarlet fever, and poliomyelitis in a higher proportion of the sera than that usually found in temperate climates.[16]

That the differences under discussion between cooler and warmer climates are not due to variation in sanitation with latitude but are in reality determined by climate itself is perhaps most strikingly suggested by the occurrence of the same differences in diphtheria between two cities in the same latitude—Santos and Sao Paulo, Brazil, not fifty miles apart but one situated at sea level and the other at 7,500 feet altitude.[17] Altitude produces the same effect as latitude. The same difference has been observed in poliomyelitis in Bogota and at sea level in Venezuela.

The parallelism between latitude and climate is, of course, not an exact one. In addition to altitude, other factors, such as ocean currents, account for marked variations: for example, the effects of the Gulf Stream. On the North American Pacific Coast the more precise variations with latitude seen in the interior do not occur. A number of infectious diseases ordinarily conforming closely with latitude in respect to such features as incidence or seasonal prevalence are aberrant, partaking of some features characteristically southern and others characteristically northern. In this connection it may be pointed out that poliomyelitis in Japan corresponds closely with poliomyelitis in the Southern United States in respect to incidence, age distribution, and seasonal prevalence.[18]

Another phenomenon common to this group of diseases is that of maternal passive immunity. Since in adults immunity is high, passive immunity in infants, as would be expected, is likewise high. This has long been established by antitoxin measurement in diphtheria as lasting from three to six months, and has been demonstrated in poliomyelitis by virus neutralization tests.[19]

Just at the time when the results of immunity tests, so generally accepted and widely used as a measure of the dissemination of other infectious agents, were reaching the point of full verification of the implications of age distribution in respect to the pattern of infection with the virus of poliomyelitis, the epidemiologic significance of immunity in poliomyelitis was overshadowed by the advancement and exploitation of the theory that immunity was the result not of exposure to the virus but of "physiologic maturation." It was not until Olitsky and Findlay's neutralization tests [20] in 1946, done in the face of the strikingly high incidence of poliomyelitis in troops as compared with tropical natives—and indicating high immunity in native children—that the implications of the earlier work on immunity again entered heavily into conceptions relating to the epidemiology of poliomyelitis, and finally attained a place in the minds of many as a true indication of widespread exposure to the virus—as widespread as is exposure in the other "immunizing infections of childhood."

Maternal immunity in offspring of immune mothers in a rodent poliomyelitis has been shown to protect against disease but to allow active immunity on injection of fully active virus. Virus injected early in the period of maternal immunity produced no effect; when injected later in the period of maternal immunity, the mice developed persisting active immunity (but without disease); when the virus injection was given still later, all succumbed to disease, as was the case with the young of non-immune mothers when given active virus at any age.[21]

[13] Aycock, W. L., and Kramer, S. D.: Immunity to Poliomyelitis in Normal Individuals in Urban and Rural Communities as Indicated by the Neutralization Test, J. Prev. Med. 4:189 (May) 1930.

[14] Aycock, W. L., and Kramer, S. D.: Immunity to Poliomyelitis in Southern Population as Shown by Neutralization Test, J. Prev. Med. 4:201 (May) 1930.

[15] Aycock, W. L.: Virus and Rickettsial Diseases, Harvard Univ. Press, Cambridge, Mass., 1940, p. 567.

[16] Doull, J. A.; Hudson, N. P., and Hahn, R. C.: Note on Poliomyelitis, Diphtheria and Scarlet Fever Antibodies in Serum from the Philippines, Am. J. Hyg. 21:540 (May) 1935.

[17] Doull, J. A.; Ferreira, M. J., and Parreira, D.: Common Infectious Diseases in Brazil; Their Prevalence in Comparison with Certain North American Areas, J. Prev. Med. 1:503 (Nov.) 1927.

[18] Paul.[3]

[19] Aycock, W. L., and Kramer, S. D.: Immunity to Poliomyelitis in Mothers and the Newborn as Shown by the Neutralization Test, J. Exper. Med. 52:457 (Oct.) 1930.

[20] Olitsky, P., and Findlay, G. M.: Use of Rodent-Adapted MEFI Strain of Human Poliomyelitis in Neutralization Tests with Serum of Apparently Normal African Natives, J. Bact. 52:255 (Aug.) 1946.

[21] Aycock, W. L., and Curley, F. J.: Variolation as a Principle. Immunization in Experimental Poliomyelitis with Active Virus Under Autarceologic Protection of Estrogenic Substance, Am. J Med. Sci. 214:128 (Aug.) 1947. Curley.[22]

[22] Curley, F. J.: Personal communication.

In temperate climates, as shown by the several immunity tests and as reflected in the age distribution of disease, immunity of the population is at a high level during the first six months of life and at its lowest level at one to two years of age, after which it increases steadily and in accord with opportunity for exposure to the infectious agent, until the high level which had existed at birth is reestablished in adult life. In tropical areas, not only does the age distribution of the disease suggest that exposure to virus more often approaches the early period of life when there is high maternal immunity, but neutralization tests in such an area suggest that the gap between maternal passive and acquired active immunity may be lacking. Olitsky and Findlay found that all of 72 sera from "healthy" natives of British West Africa from 1 to 40 years of age (8 were under 10) neutralized the MEFI strain of virus.

A series of neutralization tests in 1933 and 1934, the interpretation of which was not entirely clear at the time,[23] were done in the course of a survey of immunity to poliomyelitis in tropical island populations, one object of which was the finding (so far unsuccessful) of a population free of immunity (needed at the time as a convincing answer to the challenge of spontaneous physiologic maturation). The possibilities of finding such an isolated population are not exhausted, but the occurrence of a "virgin soil" type of outbreak on the island of Nauru in 1910, restricted to the native half of the population, suggests that a survey previous to that time doubtless would have uncovered an absence of immunity. Incidentally, the "isolation" of this group at that time is likewise suggested by the wide occurrence of leprosy on the island following a clear history of its introduction at about the same time.[24] Of sera from 32 natives of the Fiji Islands tested against an American and an Australian virus, 26 of the 27 from adults showed the presence of antibodies. Sera of younger individuals, 11, 11, 12, 16, and 18, all neutralized the virus. Of 27 sera from "normal" natives in Samoa, 23 completely neutralized the virus, and 4 gave evidence of partial neutralization, the animals inoculated with the serum-virus mixture developing disease after incubation periods of 17, 18, 20 and 21 days, as compared with 7, 7, 8, 9, and 14 days in control animals. These four sera were from children 3, 4, 5, and 5 years of age. Nine other sera from children under 10 years of age completely neutralized the American laboratory strain of virus (isolated in Vermont in 1921). That immunity as revealed by the several tests is a result of previous exposure to the infectious agent would no longer appear to need argument. Suffice it to say that wherever tested, either by clinical observation or by virus detection, the development of immunity has been in accord with opportunity for exposure. To be sure "control" areas (where virus and immunity are both absent) have not been found, but truly isolated populations insofar as human-to-human transmission is concerned are not to be found easily in the present day. The last thoroughly studied "virgin soil" epidemic of measles (Faroe Islands) occurred just over 100 years ago. Perhaps the development of immunity to yellow fever, only in areas where there is opportunity for exposure and never in areas or in persons where previous exposure to the virus could be excluded, should suffice as "proof" of association between the presence of virus and of immunity.

Virus Detection

In diphtheria Morales and Mandry [25] have actually put to test the epidemiologic "hypothesis" that subclinical immunity is a result of exposure to the infectious agent in Porto Rico. They followed a group of 194 Schick positive native school children with frequent throat cultures for diphtheria bacilli. At some time during the period of the study virulent bacilli were demonstrated in 26 individuals and in 168 they were never found. Of the 26 who harbored virulent organisms 24 became Schick negative, and 151 or 90 per cent of those who were never shown to harbor bacilli remained Schick positive.

As stated earlier, clinical observation alone affords a satisfactory demonstration of both the extent of spread of the virus of measles and of immunity resulting from infection with it. When immunity tests and virus detection are added, evidence is likewise afforded that the extent of dissemination of the subclinically immunizing viruses and of immunity from infection with them is of the same order as that in measles and therefore of an extent over the entire world only known to take place through person-to-person contact.

The disappearance of cholera in the United States within about twenty years after a widespread occurrence following its introduction in 1830 (described under the somewhat odd title "The Conquest of Cholera") soon followed when we began to get away from the river life of the

[23] Aycock.[15]

[24] It might be mentioned here that because of the racial composition of its population, and good records, there is in Hawaii an opportunity, unequalled anywhere, for studies which would go far to answer the century old medical controversy—to what extent supposed "prolonged and intimate exposure" or inherited susceptibility is the major determinant in the extraordinary regional, racial and familial restriction seen everywhere in the occurrence of leprosy.

[25] Morales, E. G., and Costa Mandry, O.: Mechanism of Natural Immunity to Diphtheria; Preliminary Report of Experiments in Porto Rico, Am. J. Hyg. 14:89 (July) 1931.

times on the Mississippi and the Ohio. It well illustrates the precarious method of transmission chosen by this disease. Cholera is now a problem only in restricted areas where optimal conditions for transmission exist. Typhoid fever has been able to maintain an existence only by reason of the added mechanism of chronic carriage, but it too is steadily diminishing as with increase in sanitation the chances of continuous transmission are diminishing to the point where the failure of recruitment of new chronic carriers is causing it to lose its grip. Typhoid Mary can claim credit for only 50 odd cases in a lifetime, a feat which can be accomplished by a single case of measles in a day.

By the time the period of controversy which followed the challenge of "maturation" was subsiding, emphasis in epidemiologic research in poliomyelitis had shifted to attempts to establish the pattern of virus distribution through its actual detection. The "rediscovery" of virus in intestinal contents reopened the whole question of mode of spread in the minds of many, with the result that exhaustive attempts were made to detect the virus not only from numbers of human sources but from a wide variety of non-human sources. There was a great emphasis on the detection of extra-human virus reservoirs, doubtless prompted in part by the temporary dismissal of the large accumulation of evidence pointing to widespread subclinical infection and further stimulated by a resulting re-emphasis of the long known inability to demonstrate the criteria usually sought to establish contagiousness between clinical cases—the occurrence of disease in those associated with the sick. It became the fashion to "discard all previous conceptions"—the force of the combined studies of Caverly, Wickman, Frost, and Flexner, which had "dominated the scene too long"—and to test any hypotheses by the sole method of virus detection; a phase of research which reached its height in a title as inclusive as "Attempts to Recover Poliomyelitis Virus from Fruit, Well Water, Chicken Cords and Dog Stools." The confidence with which the hunt for extra-human virus reservoirs was on is well illustrated by an abstract of this article which seems to assume that failure to find the virus was only a failure in technique when it says: "Although the virus may have been present in the specimens tested, its existence could not be demonstrated when either the eastern cotton rat or the Macaca mulatta monkey was used as the test animal."

During more recent years the detection of virus in intestinal contents has received far greater emphasis. Although it is clear that virus may be found in intestinal contents for a longer period than in the oro-pharynx where it has been detected during the fiirst week of the infection (the period coinciding with the infectious period according to available evidence), it cannot be affirmed that it is more often present in intestinal contents.

When we consider then, not only that the extent of immunity to poliomyelitis is the same as for measles and diphtheria but that the rapidity of its development varies in the same way with concentration of population, and add to this the detection of virus in the upper respiratory mucosa, we have evidence that both the extent and rapidity of the spread of the virus of poliomyelitis are the same as in measles or diphtheria.

It is for this reason, therefore, that it is not possible to attach an epidemiologic significance to the presence of poliomyelitis virus in intestinal discharges in the absence of comparable information on other viruses. For example, is the virus of measles present in feces? As a matter of fact, lesions in the intestinal tract have been found in a number of diseases clearly not transmitted by intestinal discharges which make it likely that their viruses may also be present in intestinal contents and presumably in sewage. Koplik spots have been found in the colon in measles,[26] as have been characteristic cellular changes in varicella.[27] Nonetheless this single laboratory finding seems to have been largely responsible for a very general shift from previously long accepted conceptions to the belief that "the epidemiology of poliomyelitis may be considered to be similar to that of other enteric infections." It is this belief which forms the crucial link in the chain of argument which has been advanced to the effect that the lower incidence of poliomyelitis in warmer climates and its supposed increasing incidence in cooler climates is a matter of poor sanitation and fecal transmission.

Since the patterns of virus dissemination and immunity are essentially the same in the members of a group of diseases, poliomyelitis, diphtheria, and scarlet fever, it is believed that the relative frequency with which clinical disease and subclinical immunity results from infection with the different infectious agents cannot be accounted for in general by "immunity from previous exposure" but are actually due to different autarceologic factors in the different diseases. The question has been little studied in diphtheria and scarlet fever. In poliomyelitis there are a number of selectivities seen in the occurrence of the paralytic disease in the few of them any exposed to the virus which indicate that this "complication"

[26] Corbett, E. U.: Visceral Lesions in Measles with Report of Koplik Spots in Colon, Am. J. Path. 21:905 (Sept.) 1945.

[27] Johnson, H. N.: Visceral Lesions Associated with Varicella, Arch. Path. 30:292 (July) 1940.

of the ordinarily subclinical infection is determined primarily not by circumstances of exposure to the virus but by autarceologic influences. The notable example—already being taken into account in the prevention of numbers of cases of a particularly distressing and highly fatal form of the disease—is bulbar poliomyelitis following tonsillectomy and adenoidectomy.

Though the frequency with which the different infections are clinical or subclinical may be highly individualized in general, as the result of the operation of different autarceologic factors in the separate disease, they all possess a corresponding reduction in the frequency of clinical disease as compared with subclinical infection as warmer climates are approached. The evidence for a similarly more rapid and extensive dissemination of all the infectious agents in warmer climates suggests that earlier infection in warmer climates, and hence infection more often under the protection of maternal passive immunity, may afford the explanation for this phenomenon which the three diseases have in common.

Mechanism of Increased Virus Dissemination in Warmer Climates

A mechanism which may account for the dissemination of virus at a more rapid rate and more extensively in the tropics is suggested by a study of amplitudes of seasonal variation in a number of diseases in cooler and warmer climates.[28] With certain exceptions, bacterial diseases which spread directly from person to person have an amplitude of low order. Another group, including diseases transmitted by intermediary hosts, have an amplitude of higher order; and a third group, virus diseases, exhibit a still greater amplitude in seasonal variation. It was considered significant that the three curves in respect to amplitude occur in exact multiples. The reason for the exact multiple relationship was believed to be the simultaneous influence of season on one, two, or three factors involved in the occurrence of diseases of the respective types. It is suggested that one of the factors involved in the group of diseases exhibiting an amplitude of a higher order is, in addition to seasonal variation in susceptibility to disease upon exposure, a seasonal variation of the same period and phase in multiplication, and hence in spread, of the virus. For example, under this conception it could be reasoned that the virus of poliomyelitis requires host conditions of warm weather (or warm climate) both for disease production and for multiplication and hence propagation. Such a conception, under which this virus could be active for only a brief part of the year in more temperate climates and throughout the year in warmer climates, could account for the more rapid and extensive dissemination of the virus in warmer climates.

Thus the reason for one of the puzzling paradoxes of poliomyelitis—the fact that it is a disease of warm weather but of cool climates—finally begins to come to the surface. For many years it has been evident that the conventional explanation for seasonal prevalence of disease—a corresponding variation in the mechanism of transmission—could hardly account for the seasonal prevalence of poliomyelitis in the face of this feature of the disease.[29] Nonetheless, adhering to the old doctrine that contact diseases are diseases of winter because of crowding, the seasonal prevalence of poliomyelitis has always been the point of departure for opposed hypotheses.

Under the same doctrine the view, originating largely in carrier studies during World War I, that an increased carrier rate is always the forerunner of an increase in meningococcus meningitis, in spite of many discrepancies in the evidence, had come to be generally accepted. During World War II an extensive meningococcus carrier survey revealed no seasonal variation in meningococcus carrier rates. This observation points to variation in frequency of clinical disease in carriers rather than to any variation in transmission of the meningococcus as the determining factor in the seasonal prevalence of meningitis, and suggests seasonal "predisposing" factors as the major determinant of meningitis in meningococcus carriers.[30] Little information is available on the year-around prevalence of other infectious agents. But if the finding of the virus of poliomyelitis in sewage only in the poliomyelitis season, or a prevalence of carriage in summer, as suggested by the seasonal prevalence of bulbar poliomyelitis following tonsillectomy,[31] can be compared with the seasonal prevalence of meningococcus carriage based on some 50,000 throat cultures, there is the suggestion that the meningococcus is capable of multiplication and propagation the year around while multiplication of the virus of poliomyelitis is restricted in respect to season. This suggests that seasonal (or climatic) changes influence the suitability of the human host as a "medium" for the growth of the virus. This view is consistent with the fact

[28] Aycock, W. L.; Foley, G. E., and Hendrie, K. H.: Epidemiological Significance of Amplitudes of Seasonal Fluctuations in Infectious Diseases, Am. J. Med. Sci. 211:709 (June) 1946. Aycock *et al.*[29]

[29] Aycock, W. L.; Lutman, G. E., and Foley, G. E.: Seasonal Prevalence as Principle in Epidemiology, Am. J. Med. Sci. 209:395 (March) 1945.

[30] Aycock, W. L., and Foley, G. E.: Serologic Types of Bacteria as Epidemiologic Principle, Am. J. Med. Sci. 211:350 (March) 1946. Aycock *et al.*[28]

[31] Aycock, W. L.: Tonsillectomy and Poliomyelitis; Epidemiologic Considerations, Medicine 21:65 (Feb.) 1942.

that meningitis exhibits an amplitude of a low order in seasonal variation, and poliomyelitis one of high amplitude in temperate climates and lower amplitude in warmer climates.

A review of the observations which form the basis of this paper serves to lend strength to the view that the spread of the virus of poliomyelitis is extensive and as has been stated, a function of ordinary, unavoidable and probably irreducible contact. It furthermore emphasizes that infection with this virus is preponderantly benign—the one serious sequel of infection, paralysis, occurring in only a small fraction of those exposed. In the tropics the evidence indicates that in terms of parasitism adaptation between virus and host is even more nearly balanced. Widespread exposure to the virus, more frequently during the persistence of equally widespread maternal immunity, apparently results in more frequent modified infection (but still with propagation of virus) with resultant active immunity to be passed on to the offspring for repetition of the cycle. Thus we can say that in warm climates a high degree of commensalism with the virus has been attained.

In respect to the employment of the principle of vaccination in poliomyelitis, numerical considerations more like those in rabies than those in smallpox obtain. While a vaccination procedure might, as in small pox, diminish the "virus reservoir" (conversion of non-immune individuals capable of multiplying and transmitting the virus to immunes not capable of doing so), if any prospective vaccine carried a hazard approaching the "natural" risk of disease in the individual, its applicability would be highly doubtful. Indeed we have been through one experience where the risk of attempted immunization proved to be about as great as the risk of disease. If, as in the sense of selective immunization in rabies, the use of a poliomyelitis vaccination could be restricted to the few who are susceptible to *paralysis in poliomyelitis*, vaccination in poliomyelitis would be quite a different matter.

If this conception offers an explanation of one of the long puzzling paradoxes of the disease—a disease of warm weather but of cool climates—it at the same time introduces another—that the disease is one of climates where the dissemination of the virus is less and not of climates where it is more. This might seem almost to constitute an argument (seeing that the virus is preponderantly immunizing rather than paralyzing—and even more so in warm climates by reason of earlier exposure) that speeding up the spread of virus rather than hampering it (by attempts at isolation, quarantine, etc.) would be a more effective preventive measure against paralysis than any that we have.

Studies relating to the control of infectious disease, the goal of which has been irradication, have long centered on the infectious agent and its mode of spread not only as a *sine qua non* but as the *ne plus ultra* for prevention. The studies relating to subclinical immunization reviewed in this paper suggest that in poliomyelitis all the other elements entering into what constitutes an extraordinarily high degree of balance between this parasite and its host in warmer climates should be taken into consideration in attempts to prevent the one serious but exceptional sequel of infection with this virus—paralysis. At any rate, the mechanism through which a lower incidence of paralysis occurs in warmer climates seems to be the operation in nature of the principle of variolation rather than the principle of vaccination.

Discussion

DR. C. L. WILBAR, JR.:—We are fortunate in having Dr. Aycock visit the Territory of Hawaii and present to this Association his well thought-out views on the epidemiology of poliomyelitis. Dr. Aycock has studied this subject most extensively at Harvard University for the past thirty-two years. It is doubtful whether anyone has given more study to this particular subject.

What Dr. Aycock has said seems to me to be logical and reasonable. However, as he points out, it is still largely in the realm of theory. Careful studies of the epidemiology of individual cases as to their age, location, racial background and familial characteristics are necessary for proving the absolute value of this theory. It is to be hoped that such a study may some day be done in Hawaii. There is probably a greater ethnic racial mixture of peoples here in an unsegregated state than anywhere else in the world.

Some data have been compiled by Dr. James Enright of the Health Department staff showing that by far the highest incidence of the disease here is in Caucasians and the lowest in Hawaiians; in fact, there is a complete reversal of the racial incidence of poliomyelitis compared to the racial incidence of tuberculosis. Much of our Caucasian population has, of course, come here from the mainland. We have comparatively little poliomyelitis here. Even when there have been epidemics on the mainland we have had little increase in the local incidence of the disease. Our death rate is also quite low. During our last epidemic, which occurred in 1943, there were but 73 cases and no deaths in the Territory. There have been only two deaths from the disease in the past five years. There was some rise in the number of cases of poliomyelitis last year, but the last case reported to the Health Department was in February 1948, and the last case before that in September 1947.

This is not reason for medical complacency regarding poliomyelitis here but it is reason, in my opinion, for attempting to alleviate much of the popular fear of it, which is out of proportion to its prevalence and the chances of getting paralysis or death from it.

May I express my appreciation to Dr. Aycock for a well written paper on an original theory which is of considerable import to our Territory.

Sudden Death in Filipino Men: An Unexplained Syndrome

ALVIN V. MAJOSKA, M.D.
HONOLULU

The Health Department and the Office of the Coroner of the City and County of Honolulu have been aware of a peculiar syndrome affecting young male Filipinos for at least the past eleven years. Despite all efforts to determine the cause of this syndrome, the initiation of the fatal sequence of events is still unknown. The present paper will (1) describe the syndrome, (2) present a statistical analysis of the cases discovered during the past eleven years, (3) describe what has been done in an effort to determine the cause, and (4) explain what these deaths are *not* due to.

The Syndrome

In brief, the fatal syndrome seems to affect only healthy young Filipino men who retire in apparently the best of health and then expire sometime during the night. The death is usually preceded by sounds of gasping, groaning, moaning or choking. The post-mortem findings consist principally of cyanosis, generalized visceral congestion, subpleural and subepicardial petechial hemorrhages, and gross or microscopic evidence of acute hemorrhagic pancreatitis. Frequently the stomach is dilated by a large amount of partially digested food. The syndrome apparently does not affect women, or men of other races. A review of the medical literature has failed to reveal any description of a similar syndrome. A communication from Juan Z. Santa Cruz, M.D., of the University of Santo Tomas in Manila, reveals that a similar syndrome probably does occur in the Philippine Islands, where it is given the name "Bangugut" by the laity, to convey the idea that the person died from a nightmare. It was observed by the Tagalogs that the person tries to rise (bangun) and to groan (ugul); the term "Bangugut" is formed from these two words. In Dr. Santa Cruz' series of unpublished cases he has found the following in diminishing order of frequency: (1) a full stomach containing a large accumulation of partially digested rice; (2) acute cardiac dilatation, especially of the right ventricle; (3) acute hemorrhagic pancreatitis. A similar communication from A. G. Sison, M.D., Dean of the College of Medicine of the University of the Philippines, reports the same observations. The hypothesis suggested by Dr. Sison is that there may be a certain cardiac inhibition, reflexly, through the vagus, brought about by an unduly distended stomach. Dr. Sison also reported that similar cases of death were observed amongst swimmers who were drowned after plunging into cold water, after having indulged in a heavy meal. However, none of the cases considered in this series died out of bed.

Read before the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 7, 1948.

Analysis of Data

In an attempt to analyze the cases statistically, all of the autopsy protocols from January 1, 1937 to date, contained in the files of the City and County Health Department, were reviewed. There were found 51 cases in the years 1937 to 1944, inclusive, which probably belong to the category of deaths considered here. There were 30 such deaths from January 1, 1945 through April 30, 1948. These two groups will be considered separately since I am personally acquainted with the cases occurring after January 1, 1945, and know of the other fifty-one cases only as a matter of autopsy protocol.

A statistical analysis of these cases reveals the following order of frequency per year:

1937	5 cases
1938	1
1939	5
1940	3
1941	7
1942	4
1943	5
1944	21
1945	9
1946	10
1947	9
1948	2

Arranging these cases according to the month of death, the following results are obtained:

MONTH	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
January	5	3	8
February	2	5	7
March	6	3	9
April	3	2	5
May	3	4	7
June	2	4	6
July	5	2	7
August	6	3	9
September	4	0	4
October	3	1	4
November	4	1	5
December	8	2	10
	51	30	81

It may be seen from this analysis that there does not seem to be any particular seasonal occurrence of these deaths.

The incidence of these deaths according to age groups was found to be as follows:

AGE	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
20-24	1	0	1
24-29	7	3	10
30-34	22	10	32
35-39	10	7	17
40-44	6	8	14
45-49	4	2	6
50-54	0	0	0
55-60	1	0	1

Analyzing these cases according to their marital status the following results are obtained:

MARITAL STATUS	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
Single	38	18	56
Married	5	7	12
Widowed	1	0	1
Divorced	0	4	4
Separated	2	1	3
Unknown	5	0	5

The apparent preponderance of single Filipino men as compared with married Filipinos is relative, since it is estimated that there are approximately twenty marriageable Filipino men to each marriageable Filipina woman in the Territory at the present time.

The occupations of the deceased individuals were studied and it was noticed that there was a consistent lack of exposure to noxious industrial substances in practically all cases. The occupations were as follows:

OCCUPATION	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
Laborer:			
Unspecified	31	5	36
Plantation	1	3	4
Industrial	3	6	9
Stevedore	3	3	6
Truck driver	0	2	2
Mechanic	0	2	2
Mechanic's helper	1	0	1
Truck loader	0	1	1
Crane operator	1	0	1
Welder	1	0	1
Electrician's helper	0	1	1
Painter	0	1	1
Carpenter	1	1	2
Presser (laundry)	0	1	1
Cook	0	1	1
Waiter	0	1	1
Jack-hammer operator	0	1	1
Janitor	1	0	1
Dishwasher	1	0	1
Barber	1	0	1
Journalist	1	0	1
Manager (unspecified)	0	1	1
Unknown	5	0	5

An analysis of the place of death reveals the following, considering rural Oahu as all of Oahu outside of the city limits of Honolulu:

PLACE OF DEATH	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
Honolulu	26	20	46
Rural Oahu	25	10	35

The following table shows the approximate time of the demise of these cases. The time in all of the cases as noted is fairly accurately determined because of the notice of symptoms by either a roommate or a neighbor. Those cases labeled "unknown" are those cases where there was no evidence of symptoms and the deceased was simply found dead in bed on the following morning after retiring the previous evening as usual.

TIME	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
9-10 p.m.	1	0	1
10 11 p.m.	2	3	5
11-12 p.m.	3	2	5
12-1 a.m.	2	1	3
1-2 a.m.	3	1	4
2-3 a.m.	5	6	11
3-4 a.m.	2	4	6
4-5 a.m.	3	3	6
5-6 a.m.	1	0	1
6-7 a.m.	0	1	1
7-8 a.m.	1	0	1
Unknown	27	9	36
Noon	1	0	1

The one individual dying in the daytime was one who worked at night and died at noon in his sleep.

The signing of the death certificate in most of these cases has been an extremely difficult task. Acute hemorrhagic pancreatitis was not recognized as a probable etiologic factor until March 1, 1944, and after that time the diagnosis of acute hemorrhagic pancreatitis appeared on the death certificate with fair regularity. A listing of the causes of death in the 51 cases occurring from 1937 through 1944 reveals the following causes of death in the cases selected here:

Lobar pneumonia	2
Bronchopneumonia	1
Coronary sclerosis	4
Acute hemorrhagic nephritis	1
Pulmonary tuberculosis	1
Chronic myocarditis Chronic asthma Acute pulmonary edema	1
Chronic tuberculosis Chronic nephritis Luetic aortitis Chronic myocarditis	1
Chronic myocarditis Myocardial infarction Minimal pulmonary tuberculosis	1
Acute pleural shock due to spontaneous pneumothorax	1
Coronary sclerosis Chronic myocarditis Chronic nephritis	1
Coronary occlusion	3
Acute pulmonary edema due to coronary sclerosis	1
Caseous tuberculosis Coronary sclerosis ??	1
Acute coronary thrombosis	1
Coronary thrombosis	3
Acute dilatation of heart Chronic myocarditis	2
Acute cardiac dilation	6
Acute cardiac failure due to coronary sclerosis	1
Acute cardiac failure	1
Acute hemorrhagic pancreatitis	10
Coronary sclerosis and thrombosis	1
Pulmonary tuberculosis	1
Acute pulmonary edema due to unknown cause	1
Chronic tuberculosis	1
Left ventricular hypertrophy, cause unknown	1
Unknown (The autopsy protocol could not be located on these three cases. Only available information was the report of the Coroner's investigation which indicated that the case fell into the presently considered category.)	3

Summarizing the above causes of death, the following results are obtained:

Heart disease	28
Acute pancreatitis	10
Pneumonia	3
Tuberculosis	4
Nephritis	1
Pneumothorax	1
Pulmonary edema due to unknown cause	1
Diagnosis not specified	3

It should be noted here that the incidence of death ascribed to heart disease in this particular group of individuals is considerably higher than one would expect for a comparable group of individuals of this particular age. It is also interesting to note that detailed examination of the autopsy protocols in the above cases generally failed to reveal positive evidence for the cause of death as stated. The significant findings noted in the descriptive portion of the autopsy protocols were as follows:

Acute hemorrhagic pancreatitis	10
Narrowing of coronary arteries	6
Cardiac dilatation	7
No notable findings	7
Tubercles of lung	5
Pulmonary congestion	3
Cyanosis	3
Coronary thrombosis ??	3
Pulmonary edema	2
Full stomach	2
Coronary sclerosis	2
Submucosal hemorrhages	1
Subepicardial petechiae	1
Epicardial fibrosis	1
Myocardial infarction ??	1
Coronary thrombosis	1
Cardiac dilatation and hypertrophy	1
Mitral stenosis	1
Left ventricular hypertrophy	1
Findings unknown (due to lack of record)	3

A significant finding during the course of examining the autopsy protocols was that in many of the above 51 cases, the brain was examined in detail, whereas in other cases where the cause of death was quite obviously a large cardiac infarction, the brain was not examined. This might suggest that the examiner was not fully satisfied with the cardiac findings as an adequate explanation for the cause of death.

In the group of cases studied since January 1, 1945 the causes of death were stated as follows:

Acute hemorrhagic pancreatitis	21
Acute pulmonary congestion and edema due to unknown cause	4
Virus pneumonia ??	1
Acute gastric dilatation ??	1
Acute myocardial infarction ??	1
Undiagnosed	2

In this series of 30 cases the examiner again was not fully satisfied with the gross findings in the thoracic and abdominal cavities, so the brain was examined in 14 of the 30 cases. In none of these 14 cases did detailed examination of the brain reveal any significant pathological findings.

Detailed study of the descriptive portion of the autopsy protocols in the latter thirty cases revealed the following findings in their order of frequency:

Acute hemorrhagic pancreatitis	16
Acute pulmonary congestion and edema	13
Generalized visceral congestion	11
Cyanosis	9
Cardiac dilatation	6
Subepicardial petechiae	4
Intestinal parasites (Taenia-2, Heterophyes-1, Schistosomiasis-1)	4
Coronary sclerosis	3
Scleral injection	2
Pink lividity	2
Acute pleuritis	2
Subpleural petechiae	1
Fibromas of kidney	1
Hydroperitoneum, slight	1
Dilated stomach	1
Undigested food in small intestinal tract	1
Myocardial fibrosis	1

In retrospect I am compelled to emphasize the following findings noted above but unfortunately not noted in the autopsy protocols *routinely* because of their apparent lack of significance at the time:

The pink lividity mentioned above has been noticed in more than the two cases enumerated, despite the fact that the description of this lividity occurs in only two autopsy protocols. The lividity is similar to the cherry coloring of carbon monoxide poisoning.

Another finding which has not been mentioned in autopsy protocols is a peculiar milky fluidity of the blood noted upon the primary incision when the cephalic veins are transected. The blood which exudes from the cephalic veins into the incision of the deltoid and pectoral muscles is a peculiar milky pink instead of dark red. This finding has been observed in at least six cases.

Of the fifty-one cases occurring prior to January 1, 1945, only six had tissues examined microscopically with the following findings:

Acute hemorrhagic pancreatitis	3
Acute hemorrhagic pancreatitis } Visceral congestion }	1
Pulmonary edema } Anaphylaxis }	1
No evidence of luetic aortitis (only a specimen of the aorta was submitted as the gross impression was a luetic aortitis)	1

Microscopic examinations of tissues of seventeen of the latter thirty cases were performed, with the following frequency of positive findings:

Acute hemorrhagic pancreatitis	10
Pancreatic autolysis	4
Visceral congestion	10
Fatty infiltration of myocardium	1
Coronary arteriosclerosis and myocardial fibrosis	1
Intestinal fluke	1
Toxic degeneration of kidneys	1
Normal pancreas	1

Fourteen of the early 51 cases had chemical analyses performed with the following results:

Urine negative for alcohol, gastric contents negative for heavy metals and alkaloids	6
Gastric contents negative for heavy metals and alcohol	1
Carbon monoxide of blood negative	1
Gastric contents negative for heavy metals	1
Routine urinalysis negative	1
Blood alcohol negative	1
Urine negative for alcohol, gastric contents negative for heavy metals	1
Urine alcohol negative	1
Blood alcohol positive (0.5 mg/cc)	1

Chemical analyses were performed on 9 of the latter 30 cases with the following results:

Stomach and liver negative for heavy metals	1
Stomach negative for heavy metals and organic poisons	1
Urine alcohol negative	1
Gastric contents (and the remainder of the last meal eaten by the deceased) negative	1
Blood alcohol negative	1
Gastric contents negative for heavy metals and alcohol	1
Gastric contents negative for heavy metals and organic poisons	1
Blood negative for heavy metals, barbiturates, and alkaloids	1
Blood sugar 147.1 mg. %	1

Extensive toxicological analyses were performed on one case at the laboratory of the Territorial Board of Health and at the Toxicological Laboratory of the Department of Legal Medicine at Harvard University. The examinations failed to reveal any evidence of any poisons including curare.

The immediate symptoms of the deceased individuals as described by either roommates or neighbors who heard the symptoms are as follows:

SYMPTOMS	1937 THROUGH 1944	1945 THROUGH 1948	1937 THROUGH 1948
Coughing and choking	2	0	2
Coughing and gasping	0	1	1
Groaning	3	7	10
Gasping	7	2	9
Choking	3	0	3
Groaning and gasping	3	2	5
Screaming or yelling	4	4	8
Pain in chest	1	0	1
Spasticity as through from pain	1	1	2

In addition to the preceding analysis a further attempt at determining the cause of this syndrome was made recently by sending a letter of request for information to all of the physicians and hospitals in the Territory, submitting a list of the names of those Filipinos of this group who died since January 1, 1945. This was done because the medical history was almost completely unobtainable from the families and friends of the deceased. It was revealed that at least 15 of the 30 individuals concerned had been seen prior to their demise by some physician in the Territory. However, the medical histories as thus obtained were practically non-contributory, as they concerned widely diversified complaints of a very general and "run-of-the-mill" variety. Most of the replies were concerned principally with routine physical examinations, which were usually negative. Serologic tests were negative wherever reported. Chest x-rays were generally negative, with few exceptions. One case had an appendectomy performed eight months prior to his death. One case apparently had an attack of petit mal a few hours prior to his death. He was admitted to a hospital and was apparently in fairly good shape after having been examined. The patient was discharged and returned later the same night and expired shortly after arrival at the hospital. Another case apparently had a tuberculosis phobia because of his employment at a tuberculosis hospital. Several chest x-rays failed to reveal any evidence of pulmonary disease. This individual was found to have some cardiac enlargement with a loud systolic murmur. This same case was later diagnosed by a psychiatrist as some type of neurosis. Another case was seen by at least four different physicians for various complaints. A hyperthyroidism was discovered and a subtotal thyroidectomy performed approximately two years before his demise. Chest x-rays on this individual at one time failed to show any evidence of pulmonary tuberculosis, although the deceased was a tuberculosis contact. The above enumerated findings are the only ones that are in any way significant and no common denominator could be found in any of the cases concerned.

Possible Causes

The puzzling nature of these deaths has prompted an avalanche of suggestions as to the etiology. Regardless of the nature of the suggestion, each possibility was tracked down to the best of my ability, and each was eliminated one by one. The following paragraphs will consider some of the suggestions made and pertinent comment.

Food

The commonest suggestion was that these people were dying either because of something they ate or because of something that they did not eat. In the investigations that were conducted in some of these cases, it was clearly shown that the deceased did not eat any unusual food and that most frequently some other individuals had partaken of the same meal as the deceased, with no ill effects. Furthermore, the Filipino diet is the same for women as for men and the syndrome does not affect women. The matter of eating raw fish was proposed, but it is to be noted that Japanese eat raw fish with even greater frequency than do the Filipinos, and the syndrome does not occur in the Japanese race. A suggestion was made that the Filipinos frequently ate certain herbs, the nature of which was not too clearly understood. However, no evidence for such ingestion of herbs could be determined upon investigating many of these cases.

The lack of certain types of food has been suggested as a possibility, with particular reference to beriberi. One case of this series was clinically diagnosed as beriberi but was not followed beyond the original diagnosis. The records of the Bureau of Vital Statistics show that in the period 1937 through 1948 there were 12 deaths ascribed to beriberi, with no deaths listed for the years 1946 and 1947. The records at The Queen's Hospital reveal that there were 13 cases diagnosed as beriberi at The Queen's Hospital during the period of this survey. It is difficult to ascribe 81 deaths of an inexplicable nature to beriberi when only 25 cases of recognizable beriberi occurred during the same period of time. Malnutrition is definitely not a factor in the deaths, as practically all of the Filipinos are remarkably well developed. None of them show any evidence of edema, nor is there any marked enlargement of the heart.

Poisons

The possibility of a poison as an etiological factor has been considered and fairly well eliminated. The toxicological laboratories of the Territorial Board of Health, the Office of the Medical Examiner of New York City and the Medico-Legal Department of Havard University have run as extensive analyses as possible, including spectrographic analyses, with completely negative results, with the exception of an occasional finding of minimal quantities of alcohol. Curare has been specifically suggested as a possible poison in these cases but tubocurarin has been definitely eliminated by studies at Havard University. Furthermore, deaths due to curare are accompanied by

utter flaccidity of the musculature, whereas the deaths concerned in this series are marked by spasticity. Alcohol has been suggested as a possible etiological agent, but investigation of the lives of these individuals fails to reveal any evidence of excessive alcohol indulgence. Poisoning by scratches from poisoned cock spurs, which are allegedly used in cock fighting, has been suggested. Investigation has failed to reveal any evidence of application of poison to the spurs used in cock fighting, and none of the deceased individuals could be identified as having been to a cock fight for some time prior to his death. It has been suggested that some of these Filipinos are poisoned by some type of poison with the idea of insurance benefit collection. It is to be noted that insurance claims are filled out by me in no more than the usual percentage of deaths and that the amounts claimed are generally small, with no common insurance beneficiary. Poisoning due to insect bites, especially spiders, has been proposed as a possibility. It is difficult to conceive of a species of poisonous insect selectively biting Filipino men. Furthermore, detailed examination of the body surfaces of these Filipinos consistently fails to reveal any evidence of insect bite.

Supernatural Forces

The possibility of supernatural force producing these deaths has been proposed in all seriousness by numerous individuals, especially with the idea of voodoo witchcraft. I do not know enough of the subject to be able to discuss it lucidly. However, it is striking to note that practically all of the Filipinos of this series are remarkable for their amiability, conviviality and gentility. None of them apparently have had any enemies, and they generally have led quiet, reserved lives. None of them appear to show any evidence of worry or concern immediately preceding their demise. As a matter of fact, the activities of the evening preceding death are as mild and as varied as the following: Attending a motion picture show; playing music for a folk dance; reading newspapers; reading the Bible; writing letters; pleasure riding; and other similar innocuous activities.

Intestinal Parasites

It has been suggested that some of these deaths might be due to the accumulation of the ova of certain intestinal parasites in the coronary arteries, thereby completely occluding them. Such deaths have been observed by Africa, a Filipino investigator. A review of his reported cases reveals that the individuals concerned were outside of the age group of this series of cases and the deaths were not similar to these. Furthermore, microscopic examinations of the coronary arteries reveal no evidences of these ova. In one case of this series, Heterophyes was found in the intestinal tract. However, detailed examination of the myocardium failed to reveal any abnormalities. Further examinations of the intestinal tracts of four subsequent cases failed to reveal any further evidences of intestinal fluke. The incidence of tapeworm in these cases is no higher, generally, than the incidence of tapeworm in other Filipinos.

Hypoglycemia

Sudden hypoglycemia on the basis of an acute pancreatitis has been hypothecated. Several blood sugar determinations have been performed, with no evidence to substantiate the possibility of a hypoglycemia.

Reflex Shock

It has been suggested that the deaths in this series of cases are due to a reflex shock mechanism, possibly initiated by sudden fright or nightmare. In connection with this thought, it is to be noted that a full stomach is conducive to wild dreams. Furthermore, a large percentage of these cases retire shortly after ingesting a heavy meal. This possibility is also strengthened by an unsolicited report by a roommate of a Filipino who awoke with the symptoms which most of these cases exhibit. The roommate had a difficult time arousing the groaning individual and upon arousing him was very profusely thanked by a freely perspiring man who told a tale of being choked to death "by a little man." The only reference to this type of death found in the literature is a description of a death of a young athlete who expired in his sleep after excessive physical activity on the previous day. The case was reported by Dr. W. Raab, who has done extensive work on determining the concentration of a sympathomimetic amine in the heart. Raab's work has not been confirmed by others.

Summary and Conclusions

A report of the incidence and investigation of sudden death occurring in young Filipino men has been presented.

Certain suggested diagnostic possibilities have been discussed and fairly well eliminated.

The chief post-mortem finding in most of these cases has been an acute hemorrhagic pancreatitis, but it is not known whether this finding is cause or effect.

The problem will be investigated further.

Young Building.

Intra-Uterine Fetal Asphyxia

C. C. McCORRISTON, M.D.
HONOLULU

Fetal asphyxia during pregnancy and especially during labor may confront the obstetrician with serious problems. If the condition or conditions leading to such asphyxia are not quickly and properly met, intra-uterine death of the fetus or neonatal death due to brain damage may occur, or, if death does not occur, there may be definite and lasting cerebral damage to the fetus. It is our responsibility as obstetricians to conduct the care of our patients and to properly instruct those who are our hospital assistants in the careful observance of patients during pregnancy and especially during labor, so that fetal asphyxia and anoxia may be prevented.

It has been generally accepted that severe and often irreparable damage of brain cells may be produced by six to eight minutes of anoxemia. The onset of anoxemia may be prevented by abstinence from harmful drugs or gases or manipulations in some instances, and in others may be quickly noted by careful observance during labor so that proper and often necessarily rapid action may be taken to correct this.

Etiology

The causes of intra-uterine fetal asphyxia during pregnancy are listed by McCormick [1] as follows:

1. Coiling of the cord about the body or limbs.
2. Placental detachment, placenta previa or abruptio placentae.

In regard to these two possible causes of intra-uterine asphyxia I would like to issue a word of warning concerning external podalic version. Fetal death has been observed following external podalic version, and this procedure should not be taken too lightly. Cord compression by coiling about the body or limbs may take place with resultant fetal anoxia and death. Following such versions the fetal heart rate should be closely observed for a period of at least one-half hour, and if disturbances in heart rate are noted the fetus should be replaced to its original position. Further, no undue pressure should be made upon the fundus for fear of causing a partial placental separation. If it is necessary to use anesthesia to do an external podalic version, this should be prima facie evidence that too much pressure is necessary to turn the baby.

3. Pressure on the placenta, especially if low.
4. Drug narcosis.

In this respect, I would like to caution against unduly large doses of barbiturates and opiates.

5. Congenital deformities.

To this list of McCormick's I would like to add several others.

6. Acute vascular collapse.

By this, I mean the acute fall in arterial blood pressure that follows shock from pain or injury or acute blood loss. It may also follow the use of a spinal anesthetic given for an intercurrent condition during pregnancy. In shock or in states approaching shock the transportation of oxygen to the fetal circulation may be greatly impaired and cause fetal death. Concerning this, I would like to report a case of a 30 year old multigravida in the last month of gestation, whose prenatal course was completely uneventful until I was called to see her at her home early one morning because she had fainted and looked very pale to her family. Indeed, she looked very pale to me, too, for she was obviously in shock and had obviously lost a lot of blood, though none was evident.

She was taken immediately to the hospital and during the first day was given 3 quarts of citrated blood by vein. The fetal heart tones were not heard on admission. Within an hour of admission she went into labor and within three hours easily delivered an apparently full-term, or near full-term, stillborn fetus. No abnormalities of the baby, cord, placenta or uterus could be found. Later in the day she passed the first tarry stool. Subsequent to this, a duodenal ulcer was demonstrated.

7. Maternal asphyxia.

This may be due to smoke inhalation, near drowning, or prolonged nitrous oxide inhalation. It might be mentioned that the latter may occur in the surgeon's office or in the dental chair. Eastman [2] has shown that a mixture of 90 per cent nitrous oxide and 10 per cent oxygen, if used

Read at a meeting of the Honolulu Obstetrical and Gynecological Society, April 19, 1943.

[1] McCormick, C. O.: A Textbook on Pathology of Labor, the Puerperium and the Newborn, St. Louis, Mo., C. V. Mosby Co., 1944.

[2] Eastman, N. J.: Asphyxia Neonatorum, Internat. Clinics 2:274 (June) 1936.

for longer than five minutes steadily, can cause a definite fetal anoxemia.

8. Acute infectious diseases, especially those accompanied by high fever.

In such instances, the fetus may be deprived of oxygen by the increased oxygen want of the maternal organism and also by the increased oxygen desired by the fetus should the fetus also be affected by the infection.

9. Chronic poisoning, too, may cause maternal and fetal anoxia. Industrial gases and carbon monoxide poisoning may be mentioned in this respect.

During labor, there is a certain amount of physiological anoxemia with each contraction of the uterus, for the contraction of the uterus diminishes the placental circulation. However, this anoxemia ceases to become physiologic and definite danger may set in if the uterine contractions are frequent, prolonged and hard. With this in mind, patients with this type of labor should be carefully watched for fetal distress. The use of ergot preparations or pitocin during labor may cause tetanic contractions of the uterus. For this reason, if they are used at all, they should be used only for specific indications and not merely to hasten the delivery. Tetanic contractions may lead not only to danger of uterine rupture but also to definite diminished placental circulation and fetal distress. De Lee [3] considers prolonged hard labor the most common cause of fetal asphyxia during labor. Other common causes are listed by McCormick as follows:

1. Partial or complete separation of the placenta, or placenta previa.
2. Compression of a low implanted placenta by the presenting part, head or breech.
3. Compression of the cord, prolapsed or within the uterus, by the presenting part or by forceps blades.

The cord may also be compressed by coils about the neck, trunk or limbs, by knots or by, rarely, a rupture of the cord. A short cord may also be a factor in causing fetal anoxemia during labor.

4. Anemia from rupture of a velamentous vessel or marginal sinus.
5. Maternal anemia and asphyxia.
6. Compression of the respiratory and cardiac centers of the fetus with or without hemorrhage.
7. Narcosis from analgesics or anesthetics.

In this respect, again, one must be very careful in the use of opiates, particularly morphine, of barbiturates, and of demerol, all of which depress the fetus as well as the mother. In general, after the use of morphine it is best to allow three or four hours before delivery. Ether and gas anesthetics also anesthetize the fetus. The danger from these analgesics and anesthetics must be especially kept in mind when the fetus is premature. Again I would like to add a few more to McCormick's list.

8. An acute drop in blood pressure from a caudal or a spinal anesthetic may definitely impair the oxygen exchange to the placenta.
9. Definite compression of the fetal brain from hemorrhage or fracture or by a contracted pelvis or rigid soft parts or by forceps blades may likewise cause a fetal anoxia. De Lee states that such pressure on the brain may slow the pulse and cause anoxemia by hindering the blood from getting to the placenta, and, also by causing direct compression on the cardiac and respiratory centers.
10. The use of drugs such as sulfonamides that displace a portion of the oxygen carrying potentialities of the blood. Obviously, the use of nitrous oxide in a patient already deprived of oxygen by sulfonamide (especially sulfanilamide) therapy would be a poor choice of anesthetic if used for more than a few minutes.

Symptomatology

The most important and reliable symptom of fetal anoxia is an abnormal rate and quality of the fetal heart tones. With the onset of anoxemia the fetal heart tones are usually increased at first to 160 per minute or more but this acceleration is usually transitory and following this the fetal heart tones become slower than usual. Any fetal heart rate below 100 per minute should be looked upon with suspicion. Any fetal heart rate less than 80 per minute warrants very prompt attention. The quality of the heart tones is as important to watch as the heart rate. A gross irregularity of the rhythm accompanied by a slow rate is a bad sign.

Meconium-stained amniotic fluid should be looked upon with suspicion. The relaxation of the anal sphincter and contraction of the large bowel in an anoxemic fetus allows the extrusion of meconium into the amniotic fluid. It must be remembered, however, that meconium-stained amniotic fluid is a frequent normal finding when the breech presents and its occurrence in this instance is apparently due to mechanical pressure on the fetal abdomen.

Tumultuous fetal movements are also to be looked upon with great suspicion whether subjectively complained of by the patient or observed by attendants.

Weakening of the pulse of the cord or of a prolapsed limb is a danger signal.

Persistent blanching of the scalp to finger pressure suggests asphyxia.

Loss of anal tone when the breech presents is a warning sign.

Respiratory attempts on the part of the fetus before delivery may be noted. These may sometimes be felt with the examining finger especially

[3] De Lee, J. B., and Greenhill, J. P.: Principles and Practice of Obstetrics, 9th Ed., p. 743, W. B. Saunders, Phila., 1947.

in the aftercoming head of the breech. The premature chest excursion of the baby being born by the breech presentation may also be observed.

Prevention

The obstetrician can do as much or more in the prevention of fetal asphyxia as he can do in treating it after it has already occurred. It is here where De Lee's dictum of *primum non nocere* should be carefully considered. Normal labor should be allowed whenever possible, and unwarranted interference avoided. Injudicious and careless use of analgesics (and here again I would like to mention especially morphine and the barbiturates and, of course, a more recent one, demerol), the injudicious use of oxytocics (especially pitocin and quinine) and of general anesthetics (especially prolonged nitrous oxide) may do definite harm. This is particularly so when premature babies are involved. Prolonged labor, especially prolonged second stage, should be avoided when possible. Inept use of forceps does far more harm than no forceps at all. Hurried breech extractions and versions and extractions are not without considerable risk to the fetus.

In speaking of prevention we cannot overlook, again, the careful prenatal care and judgment of the attending obstetrician. This care must continue during labor. The judgment necessary in attempting to get a passenger through a contracted pelvis may often be a fine one and it is at times better judgment, though less heroic, to back out and admit that a test of labor was unsuccessful than to carry through and deliver a stillborn or a much damaged fetus after a long, hard labor.

It is to be emphasized that skill in judgment is of considerably more importance than a skilful maneuver although admittedly skill in technic does also play a definite role.

Administration of vitamin K to the mother, I believe, is advisable and should be repeated during long or expectedly difficult labor. Fetal heart tones should be watched at least every thirty minutes during the first stage and certainly not less than every ten or fifteen minutes during the second stage of labor. Should any sign of fetal distress appear, the fetal heart rate, of course, should be watched much more closely. This is likewise true of any protracted and difficult labor.

Treatment

When fetal distress is observed, active treatment should not be delayed. Obviously, because of the multitude of causes, the treatment may have to vary considerably to fit the etiology. When the distress is not apparently extreme and progress in labor is satisfactory, delay may sometimes be advisable. The use of a high concentration of oxygen to the mother may definitely improve the fetal oxygenation. Often because of pressure on the cord or a low-lying placenta, Trendelenburg position may also aid in relieving such pressure and thereby improving the oxygenation of the fetus.

De Lee lists three important considerations that must be kept in mind when immediate delivery is considered in an instance of asphyxiated fetus:

1. The state of the child and the probability of its living and staying alive.
2. The amount of the injury that an immediate delivery would cause to the mother.
3. Any actual danger to the mother's life which immediate delivery would incur.

With these considerations in mind and with the failure of more conservative treatment of the distressed baby, active interference should be considered. If the cervix is fully dilated, forceps delivery of the engaged head may be attempted. If the head is not engaged, version and extraction may be the method of choice. If the cervix is effaced but not completely dilated, Duhrssen's incisions may occasionally be used. In this instance, there may be also an occasional use for the Voorhees bag. If the cervix is uneffaced the choice lies between the use of the bag and cesarean section. I prefer the latter as much safer, more rapid and less traumatic. Cesarean section is likewise the safest procedure if there is any cephalopelvic disproportion.

Conclusion

1. The etiology and symptomatology of intrauterine fetal asphyxia have been discussed.
2. An acute awareness, on the part of the obstetrician, of the physiology of labor and of the various drugs and anesthetics commonly used during labor, will prevent much fetal anoxemia.
3. The nursing and resident hospital staff should be made fully aware that careful and close observation of the patient is of prime importance in discovering fetal distress early.
4. When fetal asphyxia occurs, treatment must be prompt.

The Clinic.

Adoption—A Complex Community Responsibility

MILDRED A. BUSCH
HONOLULU

THE need for care in adoption planning was the keynote of the 1948 annual meeting of the Medical Social Service Association of Hawaii. Four phases of adoption were discussed by a panel of qualified professional people.

SPEAKERS

Dr. Robert G. Hunter, Chief of Obstetrical Service, The Queen's Hospital.

The Honorable Gerald R. Corbett, Judge of the Juvenile Court.

Miss Charlotte Woodruff, Supervisor of Home Finding, Child and Family Service.

Dr. John G. Lynn IV, Director of the Bureau of Mental Hygiene.

MODERATOR

Canon Anson P. Stokes, Jr., St. Andrews Cathedral.

The "standing-room only" attendance indicated the extent of community interest in learning about adoption practices. The problem is one of magnitude. Doctors are besieged with requests for babies to adopt and social agencies receive many more applications than they have babies available. Meanwhile, "a scarce commodity black market" flourishes, with prices quoted at $1500.00 for a boy and $1200.00 for a girl. Adoption problems are of very real social significance and deserve careful and conscientious consideration by the community as a whole.

As Seen by an Obstetrician

The audience gained an appreciation of the "art of medicine" when Dr. Hunter described his concern for the problems of pregnant unmarried girls who need counseling from the doctor as well as diagnosis and medical care.

The most difficult decision is whether to keep or to give up the child and physicians are hard put at times to give proper advice. The disadvantages as well as the advantages of adoption are pointed out and, according to Dr. Hunter, the patients are encouraged to make their own decisions.

By the time the girl has decided upon adoption as a solution the man involved has been necessarily discarded for one reason or another. The girl must then decide what the future is to hold for her. If there is no future with the natural father she must think of herself and of the child. Her anxieties must be settled before she can be expected to receive maximum benefit from good medical care.

Dr. Hunter pointed out the natural mother's need for help and understanding. She must be helped to reconcile herself to a peculiar lot. She delivers a child that she never sees and she must readjust her life without the usual reward of pregnancy—a family of her own.

Adoptive parents are chosen from cases of proved sterility. When such people are referred to an obstetrician for obtaining a baby for adoption they are believed by the family physician to be mentally and physically eligible. Dr. Hunter questioned whether social agencies investigate the possibility of adoptive parents having children of their own. Miss Woodruff replied that determination of sterility by a physician is a first step in any adoption study.

As Seen by a Psychiatrist

Dr. John Lynn, in discussing the emotional problems in adoption, cautioned against inadequately considered, casual adoption placements. The child to be adopted needs the satisfaction of personal respect and achievement. He has been wounded by the loss of his natural parents and perhaps further wounded by intervening foster home or institutional placements. For this reason he needs more love and understanding than a natural child.

Motives in adoption should be closely scrutinized because of their importance in the child's personality development. Selfish motives may be hidden in a self-righteous, over-solicitous concern about the child. This concern disguises a basic rejection which the child senses and he may develop behavior problems such as bed wetting, temper tantrums, timidity, destructiveness, stealing and running away. Distorted childhood development is a forerunner of neuroses and psychoses in later life. The desire to adopt should rightly be a need in the adult to give love to a child.

Dr. Lynn advised that an adopted child be told he has been adopted. The adoptive parents should tell him that they did not get him as something that just happened, but that they went out and asked for him "special." Studies reveal that if the basic relationship is good the child will react well to this approach.

Since almost two-thirds of the children available for adoption are illegitimate, the emotional problems of unmarried motherhood are of primary consideration. The mother's real feelings and motivations should be determined before unalterable decisions are made.

One of the physicians in the audience questioned the practice of adoptive parents paying for the natural mother's maternity care. Dr. Lynn stated that the mother should be completely free to make her own decision for or against adoption. If she cannot pay her own expenses, she may make her decision too early and not feel free to change her mind if she is under financial obligation. It almost amounts to selling the child in return for the costs of maternity care. If the mother has no resources of her own, the cost should be met by a properly designated community agency.

In conclusion, Dr. Lynn stressed the role of social agencies in analyzing the emotional needs of the natural parents, of the child and of the adoptive parents as a prerequisite to successful adoption. Well intentioned but uninformed professional and lay persons should not attempt to assume alone such a major responsibility.

As Seen by a Social Worker

Miss Charlotte Woodruff expressed the desire of social agencies to be of help to physicians in evaluating tentative adoption plans.

Many people who wish to adopt a child fear an investigation into their backgrounds and private lives. They forget that people must be investigated before taking out a life insurance policy or before they may rent an apartment. Adopting a child is obviously a more serious responsibility.

Prospective adoptive parents may not have considered all that is involved in taking a child who is not their own. The reasons behind the desire to adopt may be obscure or not entirely admirable, such as adopting a child in a desperate attempt to save a marriage that may never have had a solid foundation. Both partners may not be in accord about the wish to adopt. One partner may be reluctant to admit, even to himself, that he is not yet reconciled to the impossibility of having a natural child. A careful and sympathetic talking over of these feelings can hardly be termed "investigation."

It is necessary for the social worker to fathom the motives that have brought these people to ask for a child and to estimate their capacities and limitations as parents. If, for instance, the wife has never grown up and demands exclusive attention from her husband she would find it difficult to share his attention with a child. Such a woman needs more time to grow up before she can assume mature responsibility.

A question from the audience brought into focus a long time contention between doctors and social agencies. Some physicians would refer adoption planning to social agencies if they were permitted to designate the adoptive parents. Miss Woodruff stated that in many cases physicians are right in believing that the child and recommended parents are well matched. Often, however, referrals are not made until after the birth of the child when the agency does not have time to make an adequate study. If referrals were made earlier the doctor's recommendations could be carefully considered.

Regarding early placement in adoptive homes, Miss Woodruff stated that early placements is the best procedure. If, however, there is any doubt about the background of the natural parents, the child is usually placed in a foster home until the agency is reasonably sure that the child is normal and suitable for adoption.

Miss Woodruff emphasized the value of matching the prospective parents and the child, not only according to race, but according to intellectual background, religion and even coloring. Agencies know from experience that, for example, happiness does not come of placing in a superior intellectual home a child who is incapable of getting beyond the sixth grade.

The Legal Point of View

Judge Gerald R. Corbett explained the adoption laws and described the cooperation between the Court and social agencies.

Adoption is the legal process of establishing the relationship of parent and child betwen a proper person, or persons, and a minor child toward whom he or they did not formerly sustain that relationship.

Any proper person, unmarried or married to the father or mother of a minor child, or a married couple, who can satisfy the Judge that they are fit and proper persons and financially able to give the child a proper home and education, may legally adopt any minor child whom the Judge finds to be physically, mentally and otherwise suitable to adoption by him or them.

The Judge must find that the living legal parents have given written consent to the adoption, or that the non-consenting parent or parents is or are hopelessly insane, or habitually intemperate, or that he or they have abandoned the child for a period of six months or more, or have volun-

tarily surrendered the care and custody of the child to another for a period of two years.

The Judge may act only on the basis of evidence. If the evidence is not adequate, he may ask the Territorial Department of Welfare to make an investigation. It is not a requirement. The Department is mandated by law to report back the results of the investigation but may not make recommendations.

When legal requirements have been met, the Judge may enter a decree of adoption to become final and effective immediately or at any other specified time not later than six months after the date of entry. The Judge may require supervision of the child during the waiting period and a supplemental report from the Department of Welfare. Standard practice requires periodic medical examinations and a final medical report prior to the effective date of adoption.

The decree shall change the family name of the child to that of the adoptive parents and may fix or change the child's given name. A certified copy of the decree is sent to the Bureau of Vital Statistics where a new birth record is made. The new birth record is exactly the same as though the child were the natural child of the adoptive parents.

If physical or mental abnormalities should become apparent after the adoption is declared to be final, the law provides a six months period during which the decree may be set aside "for good cause."

There were distinct differences of opinion about who should be responsible for adoption planning. One woman spoke with firmness in favor of doctors—"who should know more about our backgrounds and that of the baby than the family doctor?" Another woman volunteered to tell about her own happy experience in adoption. She had discussed adoption with several physicians, but learned that they did not have full information about the backgrounds of both natural parents. Through the social agency she was able to obtain a complete history which obviated many doubts and fears she might have had in relation to the child's development. She, personally, feels safer with the security of the complete agency investigation.

Dr. Hunter stated that physicians do not refer certain patients to social agencies for quite definite reasons. He believes that many social workers are young and unmarried and might be without the understanding that comes from personal experience. Doctors, too, have a prevalent idea that social workers tell natural mothers they must keep their babies. At this point, Miss Belle Shalit of the Child and Family Service gave a brief account of the work of qualified agencies. She agreed that severe criticism is deserved by anyone who would tell an unmarried woman that she must keep or must give up her baby. Social agencies stress self-determination and encourage all persons to assume as much independence as possible. The only contraindication would be a medical opinion indicating psychosis, feeblemindedness or other conditions resulting in the individual's being unable to plan for himself.

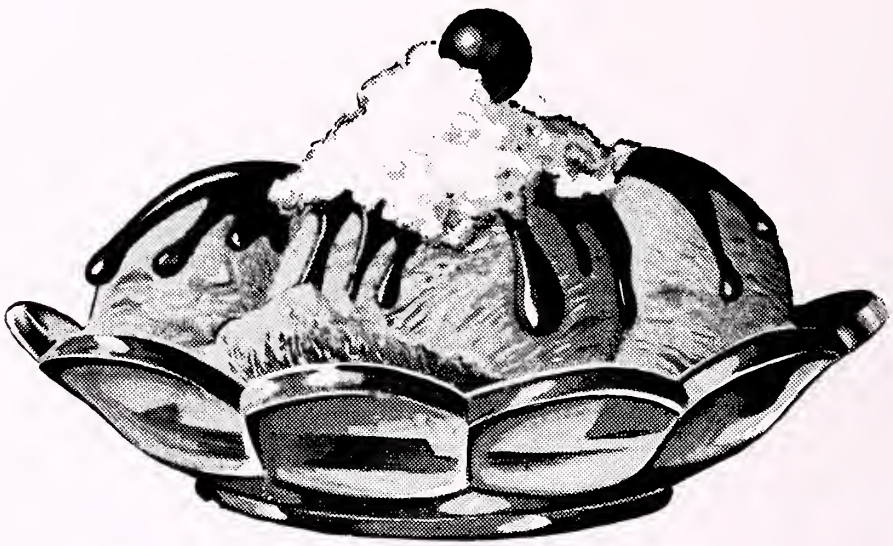
Here Judge Corbett pointed out that the final decision regarding adoption is the Court's prerogative. To the delight of the audience, including the social workers, the Judge reiterated that the Court must retain this responsibility, "otherwise the Court might as well fold up and let the agencies take over." The complete information obtained by social agencies is of great value to the Court in making its decision. There are some cases Judge Corbett thinks need not be referred if the information presented by a physician is adequate and if the physician can show good reason why further investigation should not be made.

Conclusion

Canon Stokes, the moderator, brought the discussion to a close by reaffirming that there should be no casualness, but rather that great care should be exercised in the adoption process.

The subject of adoptions was chosen advisedly. That it was pertinent to the thinking of the community was evidenced by the thoughtful participation of professional and lay persons. The interest will certainly not fade and we look forward to the time when physicians, social agencies and the Courts will work together freely without reservation or misunderstanding.

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[EDITORIALS]

THE HAVANA CLASSIFICATION OF LEPROSY

At the Fifth International Leprosy Congress, held in Havana last April, perhaps the outstanding advance was the acceptance by the Congress of a group of cases of leprosy which could not be classified into either of the two polar types—lepromatous (L) or tuberculoid (T). To this new group the South American workers had applied the term *incaracteristico* (I). At the Congress there was considerable discussion of this term and at first considerable opposition to it, but when it became apparent that the South American workers did not regard this as a third "type" of the disease but merely as a *group* of cases distinguished largely by their lack of distinguishing characteristics; and when further the South American workers made known their willingness to change the name to "indeterminate" so that the initial letter would be the same in English as in Spanish, there was no further difficulty about securing the acceptance of this new category of cases.

The proportion of cases in any given community which will be placed in this new category appears to be somewhat variable. In South America a considerable proportion of cases appear to require this designation, at least for a time, although it is not unusual for a patient to undergo transition from the "I" category to the "T" and sometimes back to the "I" again. Perhaps this sort of precision can be overdone in actual practice. In communities where laboratory facilities are poor or lacking, also, it may well be that as many as half of the cases may have to be classified, temporarily at least, as belonging to the "I" group.

This does not represent a new classification of leprosy. It merely represents official acceptance of Hansen's dual classification, using the word tuberculoid where he used the word maculoanesthetic and the word lepromatous where he used the word nodular, and adding a third group, not a third type, for those cases which cannot (yet) be satisfactorily classified, and are temporarily designated as "indeterminate."

H.L.A., Jr.

AMERICAN COLLEGE OF SURGEONS MEETING

The thirty-fourth Clinical Congress of the American College of Surgeons will be held in Los Angeles, with headquarters at the Biltmore Hotel, from October 18 to 22, 1948. The program of scientific sessions on subjects in the fields of general surgery; eye, ear, nose, and throat surgery; gynecology and obstetrics; urology; and orthopedic, thoracic, plastic, and neurological surgery, will be supplemented by operative clinics in hospitals in Los Angeles and vicinity by showings of operations by television and motion pictures, and by a four-day hospital standardization conference for hospital personnel, according to Dr. Irvin Abell of Louisville, Chairman of the Board of Regents of the College. There will also be extensive technical and scientific exhibits.

New officers who will be inaugurated at the opening evening session are Dr. Dallas B. Phemister, Chicago, President; Dr. Howard A. Patterson of New York, First Vice President; and Dr. Carl H. McCaskey of Indianapolis, Second Vice President. The outgoing officers are Dr. Arthur W. Allen of Boston, President; Dr. Thomas E. Jones

First Vice President; and Dr. Gordon B. New, Rochester, Minnesota, Second Vice President. The other officers of the College are Dr. Paul B. Magnuson of Washington, Secretary; Dr. Bowman C. Crowell and Dr. Malcolm T. MacEachern of Chicago, Associate Directors; and Dr. H. Prather Saunders and Dr. Charles F. Branch, Assistant Directors. Dr. Phemister is Treasurer.

At the Convocation which will be held on the final evening of the Clinical Congress, some 600 initiates will be received into fellowship. The American College of Surgeons, which was organized in 1913 to elevate the standards of surgery, now has a total fellowship of more than 15,000 surgeons in North, Central, and South America, and in a few other countries.

Dr. Donald G. Tollefson of Los Angeles is Chairman of the Committee on Arrangements for the Clinical Congress.

SYPHILIS RECORDS OF VETERANS

The Veterans Administration has in its custody the majority of syphilis records of those Army personnel who were treated for this disease while in active service, and in many instances can procure informative data from the syphilis records of other than Army personnel. It is thought that many physicians treating veterans for syphilis as private patients would find a resume of the syphilis record useful since the details of treatment, results of spinal fluid examinations, and blood serologies are incorporated in the records.

Resumés of these records are available to physicians who are treating such veterans provided authorization for the release of the data is given by the veteran. Requests for the resumés accompanied by an authorization for the release of the data, dated and signed by the veteran, should be addressed to the Dermatology and Syphilology Section, Veterans Administration, Munitions Building, Washington 25, D. C. It is most important that the veteran's Service Serial Number and other identifying information, such as the date of enlistment, the date of discharge, rank, and organization be included.

Ordinarily, the resumés can be furnished in approximately two weeks from the date of the receipt of the request and signed authorization.

FLOSSY MEDICAL TERMINOLOGY

My knowledge is profound, and my diction, too;
And I never use a word where ten will do....
—*Fairly old song*

Medical writing is apt to be dull and obscure enough of itself, without being made more so by the use of unnecessarily elaborate terms or, worse still, of terms which merely have an elaborate look about them.

"Male," for example, has a lovely scientific-looking air; but why use it, when with only three-fourths as many letters, you can say *"adult human* male"—that is, "man"? Similarly, why allude to a patient as a "female," when the words "girl" and "woman" are shorter, more generally familiar, and *more exact?*

"Extremities" is probably better than the old-fashioned "limbs"; and "lower extremities" can be defended on the ground that it means "thighs and legs"; but it is hard to see why "upper extremities" should ever be used, as it often is, in place of "arms."

There are places where such mouthfuls as "dermatologic" and "cardiac" and "thoracic" should be employed; but often their shorter counterparts—"skin," "heart," and "chest"—can be used to good advantage. Colloquial forms of speech are almost always brief, forceful, and generally intelligible; and it is generally better to use them if they are as exact as their technical counterparts—and always better, of course, if they are *more* exact.

NEW ANTIHISTAMINIC DRUG

An entirely new chemical substance for the rapid relief of allergic states has been announced by Schering Corporation. Bearing the name Trimeton, a brand of prophenpyridamine, this new antihistaminic is effective clinically in approximately half the dosages employed with older antihistaminics. The troublesome side reactions common to all antihistaminics are said to be at a new minimum in incidence and severity with this drug.

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Alcholics anonymous c1939 (From Bureau of Mental Hygiene)

Haggard, H. W. *Alcohol explored.* c1942 (From Bureau of Mental Hygiene)

Newman, H. W. *Acute alcoholic intoxication.* c1941. (From Bureau of Mental Hygiene)

Seliger, R. V. *Alcoholics are sick people.* c1945 (From Bureau of Mental Hygiene)

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Abrahamsen, David *Crime and the human mind.* c1944 (From Bureau of Mental Hygiene)

Alexander, Franz *Roots of Crime.* c1935. (From Bureau of Mental Hygiene)

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Hanfmann, Eugenia *Conceptual thinking in schizophrenia.* c1942. (From Bureau of Mental Hygiene)

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Alexander, Franz. *The medical value of psychoanalysis.* c1925. (From Bureau of Mental Hygiene)

Bergler, Edmund. *The battle of the conscience.* c1948. (Gift of the publisher)

Binger, C. A. L. *Personality in arterial hypertension.* c1945. (From Bureau of Mental Hygiene)

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Todd, J. C. *Clinical diagnosis by laboratory methods.* 11th ed. c1948. (Gift of publisher)

Zahorsky, John *Synopsis of pediatrics.* 5th ed. c1948. (Gift of publisher)

* * *

We were interested to note that two of our Honolulu doctors had articles published in current journals:

Gout: Report of an unusual case in a young man by Dr. Morton E. Berk in the March issue of the *American Journal of the Medical Sciences;* and

Lupus erythematosus profundus by Dr. Harry L. Arnold, Jr. in the February issue of *Archives of Dermatology and Syphilology.*

We take this occasion to again remind all doctors that the Medical Library is anxious to secure reprints of articles which have been published so that they may help complete our bibliographic file.

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The Library Committee wishes to clarify an item in the annual report to the effect that 310 journals were being currently received in the Library. Of this number, 105 are subscriptions, 107 are received as gifts from various sources, and 98 in exchange with the HAWAII MEDICAL JOURNAL. Following the discussion regarding the Library budget for 1948, it was suggested that the amount spent for subscriptions might be cut if each doctor agreed to turn over his own current journals to the Library. Such gifts have always been gratefully received and the Library welcomes any further generosity along these lines. It should be pointed out, however, that if these journals are to be useful to others, they must be turned in regularly and promptly, with the understanding that they are to become a permanent part of the Library collection. At the present time, the Library is indebted to the following doctors for gifts of this kind:

Dr. I. L. Tilden
Dr. Kyuro Okazaki
Dr. H. L. Arnold, Sr.
Dr. Harry L. Arnold, Jr.
Dr. F. L. Pleadwell
Dr. H. M. Patterson
Dr. Kiyoshi Hosoi
Dr. F. J. Halford
Dr. William O. French
Dr. Paul Wiig

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A recent statement from the Photoduplication Service of the Army Medical Library shows a slight change in policy. They will now send microfilm copies without charge on ninety day loan, providing the material is not available locally. They ask that such requests be routed through Medical Libraries, and submitted on the official order blanks, accompanied by coupons or cash. Full details will be posted on the Library bulletin board.

BOOK REVIEWS

Synopsis of Pediatrics. By John Zahorsky, A.B., M.D., F.A.C.P. Fifth Edition. 449 pp. with 158 text illustrations and 9 color plates. Price $5.50. The C. V. Mosby Company, St. Louis, 1948.

This synopsis is one of a series of similar volumes on various medical subjects. As admitted in the preface, the primary purpose of the volume is to aid students in medical school in reviewing and organizing the various subjects of clinical pediatrics. It is, therefore, essentially a condensed textbook and of necessity must omit much useful information.

This small volume is divided into sixty-two chapters of relatively equal length and so can be used as an outline for a series of hourly lectures. The illustrations are only fair and the charts and outlines are rather scarce. Discussion of differential diagnoses is incomplete and many of the more uncommon diseases are omitted.

It is not useful as a quick reference book, in contradistinction to The Compleat Pediatrician (Davison—Duke University Press). It is probably of primary value to medical students and nurses in the study or review of pediatrics.

WILLIAM A. MYERS, M.D.

Nursing of Children. By Gladys Sellew, B.S., R.N., Ph.D., in collaboration with Sister Annette Walters, M.A., Ph.D., and Sister Ann Harvey, B.S., M.D. Sixth Edition. 486 pp. with 84 illustrations. Price $3.75. W. B. Saunders Company, Philadelphia and London. 1948.

This newest edition of Miss Sellew's text incorporates the topic of social psychology with much of the material on pediatric nursing presented in the five previous editions.

The text has been written in two parts. The first part deals with social psychology of children, the field where psychology and sociology meet. Each phase of childhood—infancy, early childhood, pre-school, middle childhood and adolescence—is treated from both the social and physical aspects of growth and development. The second part deals with nursing techniques of common conditions met in pediatrics.

The material presented in the text is discussed simply and organized in logical sequence. Unusual terms or phrases are clearly explained making for easy reading. The illustrations and charts serve to emphasize important points. Many of the illustrations are from previous editions and are supplemented by new tables and diagrams. The factual data is authoritative and bibliographies are complete.

The text is intended for use in student instruction but might well be read by all nurses working in pediatric departments. It not only introduces the child to the nurse as a nursing care problem, but also as a child with psychological needs. How those needs developed, how they can best be cared for, and what place the parents occupy in the life of the hospitalized child are points that are discussed. A short history of pediatric nursing has also been included in this edition.

This text should be considered only as an introduction for student nurses to the field of pediatric nursing, since the first part is not intended to cover the complete field of social psychology of children and the second part, considering nursing techniques, embraces too broad a field to be complete in detail.

CAROL P. GILL, R.N.

Nursing History. By Minnie Goodnow, R.N. Eighth Edition. 404 pp. with 192 figures. Price $3.50. W. B. Saunders Company, Philadelphia and London, 1948.

In the dedication of this new edition of Miss Goodnow's Nursing History, we find the words "In the nursing group is the largest potential power for the correction of social ills that exist within a country." And, if we review a bit of our history, this has always been true. Go to primitive times, ancient civilizations, early Greek deaconesses and Kaiserworth—nursing might have been very crude in some respects, yet there was that feeling toward the fellow men. The many pioneers in our history of nursing have done much for the amelioration of social conditions, and will continue to carry the torch.

This new issue is a splendid chronology of professional progress.

The background of ancient times is just sufficient for this type of a textbook, enough to give understanding of how the ill and afflicted were treated at one time. Nursing in medieval times includes a list of the royal barbarian women, their approximate period and their contribution.

The book includes many very good illustrations of the more notable characters which formerly had to look through several books before finding.

The chronology of General History and the comparable one of Nursing History makes for much better association of important world events and our nursing. The strides in organization as brought out during World War II is included, plus many of the modern thoughts and trends in our work.

This book gives a splendid account; the history of nursing both at home and abroad, past and present.

The arrangement of chapters, style of writing, printing, texture of paper used, and the entire length of it makes the edition one which is attractive, interesting and practical to read and use.

ANN HANSEN, R.N.

The Medical Clinics of North America. Nationwide Number. 301-553 pp. Price $18.00 per year. W. B. Saunders Company, Philadelphia and London, 1948.

This volume of *The Medical Clinics of North America* is devoted to a symposium on the diseases of the digestive system with articles coming from Stanford University Medical School, The Cleveland Clinic, University of Toronto, and Medical College of the University of Oklahoma by such authors as Drs. Dwight L. Wilbur, Arthur L. Bloomfield, and Garnett Cheney of Stanford; George Crile, Jr., E. N. Collins, and H. R. Rossmiller of Cleveland; Jonathan C. Sinclair, and J. A. Dauphinee of Toronto; and Howard C. Hopps of Oklahoma, to mention only a few.

An attempt is made to present both the medical and surgical approach to several interesting problems including the present status of vagotomy, treatment in intestinal and colon lesions, cholecystitis and cholelithiasis, as well as many others. Of special interest to me were an article on stomatitis by Dr. Garnett Cheney with a discussion of etiology and suggested treatments, and the articles on jaundice and the various types of hepatitis discussed by the Toronto group.

This volume is in my opinion an excellent resumé of the disease entities of the gastro-intestinal tract and their treatment which should be extremely useful to the general practitioner or anyone treating such diseases.

C. M. FLORINE, M.D.

Nursing in Tuberculosis. By Louise Lincoln Cady, R.N. 481 pp. with 64 illustrations. Price $3.75. W. B. Saunders Company, Philadelphia and London, 1948.

This book is intended for the use of graduate nurses, both hospital and public health, to help them understand tuberculosis, and its many ramifications.

The book contains brief reviews of anatomy and physiology of the lungs, as it is upon this knowledge that an understanding of the effect of pulmonary tuberculosis is based.

Medical and surgical nursing of the patient in the hospital is carefully discussed, with special reference to procedures peculiar to tuberculosis patients, i e., pneumothorax, thoracoplasty, postural drainage, cough control, etc.

I was especially impressed with the author's practical material on the emotional aspects of disease, and the important relation this bears to the physical condition of the patient. Her understanding of the social complications and the need for medical social work in treating tuberculosis should provoke serious thought for nurses who may not have considered this important adjunct previously.

Much of the book dwells upon the preventive phase of tuberculosis work; the epidemiology; the early case finding by mass survey, clinic and tuberculin testing of exposed persons; the diagnosis; the isolation of the contagious case; and finally the after care and rehabilitation of the patient. Throughout is stressed the need for patient, family and community education as to the cause, prevention, care and after care of tuberculosis.

The book is readily understandable, and well arranged as to content. I believe it is excellent reference material for any graduate nurse, whether she is just entering the field of tuberculosis nursing, or has had experience, or is in the general nursing field and alert to improving her understanding of this disease.

It is a book we have been awaiting for some time. Its inclusion of the very latest chemotherapy and mental hygiene aspects are only two of the many recent developments in the field of tuberculosis care which make it well worth our perusal. Public health nurses and institutional nurses alike will find it a practical and thoroughly useful text.

AGNES V. PETERSON, R.N.

Nursing in Diseases of Eye, Ear, Nose, and Throat. 8th Edition. From the Manhattan Eye, Ear, Nose, and Throat Hospital. 309 pp. with 108 figures. Price $3.00. W. B. Saunders Company, Philadelphia and London, 1948.

This revised 8th edition is ideal for teachers and students interested in nursing of eye, ear, nose and throat diseases. The book discusses their etiology, symptoms, and treatment, but the emphasis is mainly on nursing care and preventive aspects of these conditions.

Many of the common treatments and operative procedures are given. Illustrations of instruments and equipment commonly used are excellent.

The questions at the end of many of the chapters are helpful in review of important points in the chapter and can be used for class discussion. A glossary of common terms used in the text has also been appended.

New material and two chapters on the eye have been added to this 8th edition on the following topics: Congenital Defects, Injuries to the Eye, Neoplasms, Blindness, Testing Vision, and Refractive Errors. The chapter on peroral endoscopy is very well presented, and gives useful information on nursing care of patients having bronchoscopy, esophagoscopy, or tracheotomy.

This book is invaluable to student nurses and those specializing in nuring of eye, ear, nose and throat diseases.

ALICE SHIDA, R.N.

Neuropsychiatry for Nurses. By Irving J. Sands, M.D. Fifth Edition. 397 pp. with 38 figures. Price $3.00. W. B. Saunders Company, Philadelphia and London, 1948.

Here can be found a comprehensive text consisting of twelve chapters beginning with a discussion of Neuro-anatomy and terminating with an excellent chapter on Special Nursing Procedures.

Neuro-anatomy is usually a stumbling block to student nurses, but Dr. Sands has been concise and thorough. Especially helpful in his discussion of drugs which stimulate and depress the sympathetic and parasympathetic systems.

The chapter on endocrines differs from the corresponding one in the older edition in that it contains a good discussion on "Endocrinology of Sex."

Medical psychology is discussed briefly and simply.

In the classification of the diseases of the nervous system, Dr. Sands defines and describes the occurrence, significance, and the medical and nursing treatments usually associated. Included is an interesting and informative summary of Sister Kenny's work on poliomyelitis. The author not only describes the mode of treatment advocated by Sister Kenny, but also frankly discusses the opposition she has encountered.

The remaining chapters of this text include clear and thorough discussions of psychiatric conditions and treatments, mental hygiene, psychoanalysis, and psychosomatic medicine.

I believe this 1948 edition can serve as an excellent reference for the student nurse and others. Throughout the book, I have been impressed with the clarity of expression, the inclusion of modern concepts, and the bulk of rich reference at the end of each chapter.

ANGELA M. CARLUCCI, R.N.

Tuberculosis. By Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P. 597 pp. Price $12.00. The C. V. Mosby Company, St. Louis, 1948.

This book on tuberculosis by Francis Marion Pottenger to me is one of the best books to be published recently on the general subject of tuberculosis. It includes in its discussion the phthisiogenesis, etiology, pathologic physiology, diagnosis, and treatment of this very important and serious disease. He has drawn many conclusion in his book concerning debatable problems which have arisen in tuberculosis and which have not yet been proven by any factual evidence.

Dr. Pottenger himself has no actual scientific proof of these facts for which he has made explanations. However, he has by his own statement obtained his information as a result of his long years of clinical observation in this disease. I feel that Dr. Pottenger has as much right to his opinions as, and probably more than, most of the others who have been publishing books on tuberculosis recently, in view of the fact that Dr. Pottenger himself has had close experience in the observation and treatment of tuberculosis during his lifetime. He has used this opportunity wisely, to set down and study the various phases of activity of the disease; and not only that, he has also during his lifetime conducted and completed numerous problems of research as related to tuberculosis. Therefore, we must consider that the information set forth in this book is from good authority and study this as closely as we possibly can. These ideas are reasonable and fairly complete.

The book contains the subject matter that any practitioner of medicine should have at hand. The problems which are dealt with are not only those of rather complex scientific content but they are also the answers to problems which arise in one's everyday practice. This book is an important addition to the library of any practicing physician, particularly the internist or the pediatrician and the general practitioner. I can recommend it highly for any others who may be interested in the clinical diagnosis and treatment of pulmonary tuberculosis.

FREDERICK L. GILES, M.D.

Clinical Diagnosis by Laboratory Methods. By James Campbell Todd, Ph.D., M.D., with the collaboration of George Giles Stillwell, A.B., M.D. Eleventh Edition. 954 pp. with 397 figures. Price $7.50. W. B. Saunders Company, Philadelphia and London, 1948.

This is a new edition of a well known book. Often a general practitioner looks for a laboratory book written in clear simple language without cumbersome technical details or theories. This book gives techniques in easy steps and concise clinical interpretation of the findings. Therefore, it becomes an extremely useful book for the practitioner who wishes a knowledge of the technique and of the clinical significance of a test.

In the appendix of the book, there is a list of laboratory findings in all the more important diseases. Such a list very definitely proves helpful to the clinician in selection of laboratory tests for differential diagnosis.

The book has some minor omissions. There is no mention of the Weltmann reaction, which is now applied more and more in clinical practice. The new work on keto-steroids is barely mentioned, and new methods of culture of the tubercle bacillus are very sketchily and incompletely outlined. However, to offset such omissions, the section on blood is well written and will prove extremely useful to the general practitioner. The sections on parasites and on fungi have been enlarged, and the chapter on virus and rickettsias contain some beautiful color plates and new methods for diagnosis.

All in all, the two authors are to be complimented for keeping up to date this standard book and adding constantly new techniques and new interpretations. This book will serve well the purpose for which it was published.

MICHELE GERUNDO, M.D.

Nursing Pathology. By Ramond H. Goodale, B.S., M.D. 416 pp. with 70 figures. Price $3.00. W. B. Saunders Company, Philadelphia and London, 1948.

The author, apparently well qualified for writing, and having a modern concept of nursing and education, has written this book in a free, easy style with the hope of clarifying pathology and making it possible for the students and graduates to correlate the pathological processes with the clinical entities.

The aims to be achieved through the use of the content are fairly well defined in the preface. The content, subdivided into three well organized units in harmony with modern teaching methods. The units—general pathology, applied pathology and clinical pathology are planned in such a way that may precede or correlate with other phases of the curriculum.

The pictures and diagrams are very good and easily interpreted, however, there are no summaries, references, collateral readings, outlines, questions or suggestions for study. There are no supplementary aids, laboratory instructions or instructional aids for teachers. A complete glossary with the phonetic spelling of all words is very valuable and an outstanding asset.

This book is attractive, well designed and durable, The print is clear and easily read except for a slight glossy appearance if in a well-lighted room. Spacing, paragraph margins, arrangement, placement and attractiveness of illustrative materials are all very good.

The author does not indicate whether this book was written for a textbook or a reference book. It may be used as either by student nurses, with guidance from the instructor. Probably the two most outstanding features of the book are: 1) Title is very clear and pertinent in terms of the actual contents included within, and, 2) organization of the content makes it useful as a guide or reference for both theory and practice.

ANNE M. FISHER, R.N.

Coronary Heart Disease. By A. Carlton Ernstene, M.D. 95 pp. Price $2.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1948.

It is refreshing to find someone who is willing to write a short book; not like a friend who said, "I am sorry this is such a long letter, but I did not have time to write a short one." Dr. Ernstene has taken the time to condense an up-to-date review of the important aspects of coronary heart disease. He treats with considerable judgment. His discussion of the use of alcohol in patients with coronary heart disease and in coronary failure, and also his remarks on the present use of dicumarol following myocardial infarction, are very good.

It is of interest to note that the book has no illustrations nor graphs. The only times these are missed are in the discussions of electrocardiographic changes. It would seem that a person unfamiliar with the details of electrocardiography might have difficulty in interpreting the prose where a few illustrations would have showed the changes very clearly.

On the whole, however, the book is to be highly recommended. The seventy-one references in the bibliography are well chosen and should be referred to freely.

ALFRED S. HARTWELL, M.D.

The Battle of the Conscience. By Edmund Bergler, M.D. 296 pp. Price $3.75. Washington Institute of Medicine, Washington, D.C., 1948.

This is very decidedly a psychoanalytically oriented treatment of a very important psychiatric problem. It is practically a review of psychoanalytic doctorine with special emphasis upon the author's treatment of conscience as the central fulcrum of neurotic symptom

formation. The exposition is detailed, but clear. This is a good book for the fellow psychoanalyst, for the psychoanalytically oriented psychiatrist, and for the general practitioner with a special interest in understanding psychoanalytic doctrine. It is a technical presentation, clearly written by a man who is sincere and well grounded in his subject matter.

This is not a book to be read by those who have an antipathy for Freudian doctrine. It is a bit overwhelming as intellectual fare for digestion in one or several readings. It does offer food for thought but it is rather strong and, for some, perhaps rather strange fare. The clinician who deals with everyday medical symptomatology will find it difficult to follow the tenuous, elusive analytical threads of reasoning. There are numerous clinical examples. The author is patient, persevering, sincere and thorough in his field. One cannot escape the critical query as to the practical significance of the right nuance of psychoanalytic interpretation. One wonders wherein lies the part played by the skillful manipulation of the relation of patient to doctor by an experienced clinician, and to what extent the correct nuance of psychoanalytic interpretation is essential to the clinical improvement.

Modern psychiatry owes a decided debt to Freud. Freud's concepts and interpretations have become an integral part of psychiatry. To what extent the detailed ramifications of psychoanalytic doctrine that form the subject matter of this discussion are essential to good medical practice remains a question.

This book is well worthwhile for those who are favorably disposed towards psychoanalysis, and is challenging, provocative reading for those who are critical.

J. Robert Jacobson, M.D.

Modern Clinical Psychiatry. By Arthur P. Noyes, M.D. Third Edition. 525 pp. Price $6.00. W. B. Saunders Company, Philadelphia and London, 1948.

The completeness of the third edition of this text with the new chapters should insure its remaining one of the leaders in its field. The chapter on psychoneuroses has been enlarged and chapters have been added dealing with shock therapies, psychosomatic medicine, psychotherapy and child psychiatry. The entire book is carefully written and there are not too many long case histories. As in the previous editions, there is the same orderly arrangement and treatment of the functional, organic and other psychoses. Evaluations of the subjects handled are carefully stated. The phrases "some psychiatrists select" and "it is the belief of some psychiatrists" are frequently used instead of the dogmatic statements that one finds in many writings.

The aspects and techniques of both insulin shock and electric shock are clearly presented. It is felt that the instrument of subcoma should merit more lengthy handling than has been given to it and it is noted that the average dosage mentioned to produce insulin shock is indeed conservative and low—namely, 90 to 100 units. In Hawaii, where low dosages of everything seem to suffice, not many comas would result without an amount at least 30 to 50% higher.

The section dealing with lobotomy is a superb example of the author's ability to summarize. In ten minutes reading, one can get a clear idea of its history, rationale, indications, operative techniques and the results that can be expected, both immediate and remote.

Psychotherapy, a vast and growing field in which one can hardly speak of standards, is a difficult subject to present in a general textbook but the author has done this well. The techniques of the pioneers are given and many terms are italicized and explained. Psychoanalysis is dealt with at some length. Group psychotherapy, briefly discussed in the chapter on psychoneuroses, might have fitted better into the chapter on psychotherapy and might have been treated at a much greater length. A real omission is the failure to mention occupational therapy and its advantages when integrated with pure psychotherapy.

The chapter entitled "Psychiatry and General Medicine" deals with what we are accustomed to call psychosomatic medicine. It is a fine exposition of the subject, avoiding what is sometimes spoken of as "psychiatric nonsense". The last chapter in the book dealing with child psychiatry seems to summarize adequately its basic features and the viewpoints of different schools in this field.

Any criticisms in this review are to be considered wholly minor and subsidiary to the greater praise that this text merits. Anyone interested in mental disease or any general practioner or specialist might read this work with profit and pleasure.

Jules Magnette, M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 271st regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on April 8, 1948. The meeting was called to order at 8:45 p. m. by President L. Fernandez.

Those present were Drs. R. H. Arimizu, S. R. Brown, M. H. Chang, P. Chock, W. T. Chock, E. B. Cunningham, D. S. Depp, L. R. Fernandez, V. Jim, A. Orenstein, C. L. Phillips, W. J. Seymour, F. Wong, T. D. Woo, and H. B. Yuen.

On motion of Dr. A. Orenstein seconded by Dr. W. T. Chock, the reading of the minutes of the previous regular and two special meetings was dispensed with.

A letter was read from the American Association of Blood Banks requesting endorsement of the Association by the County Medical Society. On motion by Dr. C. Phillips, seconded by Dr. T. D. Woo, the Secretary was instructed to inform the Association that we are affiliated with the Blood Banks of Hawaii which is a member of the American Association of Blood Banks.

Dr. L. Bernstein presented the report of the Special Cancer Committee. The Committee recommended that no follow-up of tumor patients by health department personnel be permitted without the signed request of the attending physician. On motion of Dr. H. E. Crawford, seconded by Dr. A. Orenstein, the report was accepted and the Secretary was instructed to notify Dr. G. A. Batten of the Society's action.

Dr. A. Orenstein gave a brief report of the status of the disaster program. Dr. Charles A. Goo was appointed as the Hawaii County Dental Society representative of the Disaster Council.

On motion of Dr. M. H. Chang, seconded by Dr. H. E. Crawford, the existing Public Relations Committee composed of Drs. M. L. Chang, H. E. Crawford and R. M. Miyamoto were re-elected.

Dr. H. E. Crawford moved that the President appoint a committee of three members to serve on a Constitutions Commitee for the purpose of drawing up a new constitution which was to provide for a Grievance Committee. Seconded by Dr. W. Seymour and passed. Drs. L. L. Sexton, H. E. Crawford and M. H. Chang were appointed.

Dr. C. L. Phillips moved that the President appoint a committee of three to serve on a Fee Schedule Committee for the purpose of studying this problem as recommended by Dr. Steele Stewart. Seconded by Dr. D. Depp and carried. Drs. H. M. Sexton, C. L. Phillips and H. Yuen were appointed. It was the consensus of the Society that contractual fees should be uniform throughout the Territory.

Dr. W. Seymour requested instructions for the delegates to the annual meeting of the House of Delegates of the Hawaii Territorial Medical Association. Clarification of the status of the assessments and fee schedules was requested of the delegates.

The scientific session consisted of a report on a case of "Listerellosis in Man" by Dr. T. D. Woo. "The Bacteriology of Listerellosis" was discussed by Mr. H. Minette of the Health Department Laboratory.

Dr. L. Bernstein read certain comments by Dr. C. B. Lara, Chief Physician, Culion Leper Colony, Philippine Islands, on the possible nature of obscure deaths among Filipinos in the Hawaiian Islands. This emphasized the importance of thiamine deficiency as a cause of sudden death in apparently healthy young Filipinos.

The 272nd regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on May 13, 1948. The meeting was called to order at 7:40 p.m. by President L. Fernandez.

Those present were: Drs. L. Bernstein, M. H. Chang, P. Chock, W. T. Chock, E. B. Cunningham, L. Fernandez, R. S. Fillmore, S. M. Haraguchi, C. Hayashi, V. Jim, W. F. Leslie, W. Loo, R. Miyamoto, S. Mizuire, H. M. Sexton, L. L. Sexton, W. J. Seymour, F. Wong, T. D. Woo; guests present were: Dr. Teagarden and Dr. Edwin F. Patton of Beverly Hills, California.

A letter was read from the Hawaii Chapter Number One, Order of the Eastern Star, requesting the Society to consider the feasibility of conducting a cancer information poll on Hawaii similar to that completed by the Health Department on Oahu. On motion of Dr. H. Sexton, seconded by Dr. S. Mizuire, and carried, the Secretary was instructed to recommend the use of the Oahu findings as the basis of a local cancer education program.

Dr. W. J. Seymour gave a general outline of matters discussed by the House of Delegates at the annual meeting in Honolulu. A detailed report will be presented in the near future.

Dr. W. Loo, Chairman of the Library Committee, reported that his Committee will serve physicians outside of Hilo in providing reference material which they request.

Dr. L. Fernandez introduced Dr. Edwin F. Patton, pediatrician of Beverly Hills, California. Dr. Patton spoke on "The Difficulties of Staying Simple and Practical in Pediatrics." A long discussion period followed.

LEO BERNSTEIN, M.D.
Secretary

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HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting of the Honolulu County Medical Society was held on June 4 in the Mabel Smyth Building at 7:30 p. m.

Dr. Gotshalk presided; 58 members were present.

The chairman anounced a meeting of Alcoholics Anonymous to be held June 7, to which all members of the Medical Society are invited.

A welcome was extended to Dr. William Blake Simpson, a new member of the Society.

Dr. Hill announced a meeting of the Honolulu Surgical Society on June 11 at which the Southern Society of Clinical Surgeons will be guests. A surgical program will be presented by members of our own society.

Dr. Hill presented the following resolution which was unanimously passed by a standing vote:

With the sudden passing of Dr. William Winter from our midst, the Honolulu County Medical Society has lost a loyal member of the profession who took an active part in community affairs, thus bringing added credit to the profession.

Dr. Winter served on many committees, medical and otherwise. We all admired his ability to express himself freely and his readiness to voice his opinion according to his convictions. His practice of the art of medicine was motivated by extreme honesty towards both patient and fellow physician.

Therefore Be It Resolved, that the Honolulu County Medical Society spread these remarks upon the minutes and express its heartfelt sympathy to Mrs. Winter.

The chairman announced that the terms of three representatives from the Honolulu County Medical Society on the Board of the H. M. S. A. had expired on June 1. Dr. Spencer, chairman of the Nominating Committee, presented the following nominations for these positions:

Dr. Joseph Palma
Dr. R. Sakimoto
Dr. L. A. R. Gaspar
Dr. Alvin V. Majoska

The chairman called for nominations from the floor. Dr. Rogers Lee Hill was nominated by Dr. Arthur and Dr. Lyle Phillips was nominated by Dr. Millard. On motion of Dr. Dickson the nominations were closed. Dr. Arthur and Dr. Devereux were appointed tellers of the election and written ballots were distributed. The following doctors were elected to serve on the H. M. S. A. Board for a two-year term.

Dr. Joseph Palma
Dr. Rogers Lee Hill
Dr. Lyle Phillips

Dr. Gotshalk introduced Mr. O. B. Patterson of H. M. S. A., who outlined the new plans now being formulated by H. M. S. A. Mr. Patterson stated that it was the desire of his organization to work in close cooperation with the doctors and he suggested that on the request of the President of the Honolulu County Medical Society he would be very happy to present regular reports concerning the progress and development of the H. M. S. A. Mr. Patterson said that the new plan will probably provide an over all coverage for members including office and house calls as well as hospital care. Some arrangement will be made about the first one or two calls during any illness, but that detail is still to be worked out. It is proposed to sell the policy to everyone at the same price and to pay doctors for all patients on the present "C" schedule until such time as a new fee schedule may be adopted by the Medical Association. This, of course, is subject to the wishes of the doctors, and will be presented to them through the proper channels.

Dr. Wiig presented a new plan for carrying out a statistical study of cancer research which would use the $9,000 appropriated from the National Research Committee. Under this new plan Dr. Irvin L. Tilden would have the services of a statistician and a secretary who would be paid. Dr. Walter Quisenberry and a third member, appointed by the Hawaii Cancer Society would work with Dr. Tilden under his guidance. The project plans to cover all cases of cancer beginning with January 1, 1948. Later it may be possible to go back several years. It is desired to have a continuing study carried on in future years.

On motion of Dr. Phillips, seconded by Dr. Berk, the Honolulu County Medical Society approved of a statistical research study on cancer, conducted by Dr. Irvin L. Tilden, assisted by Dr. Walter Quisenberry and another medical member of this committee to be chosen by the Hawaii Cancer Society.

Dr. Palma asked whether the Society wished to ratify the continuance of the "C" fee schedule by H. M. S. A. until such time as a new fee schedule is adopted by the Medical Association. He asked whether the Society would like to take such action at this meeting or would prefer to have further information submitted to the Board of Governors.

On motion of Dr. Phillips, seconded by Dr. Hill, the Society voted that the continuance of the "C" fee schedule by H. M. S. A. be referred to the Board of Governors with power of action.

The following program was presented by members of the Honolulu Academy of General Practice:

"An Interesting Case" by Dr. Henry S. Dickson.
"Psychosomatic Medicine from the General Practitioner's Viewpoint" by Dr. Marquis Stevens.
"The Place of the General Practitioner in the Practice of Medicine" by Dr. Alvin V. Majoska.
"Three Cases of Interest Seen in the Usual Run of General Practice, with a Short Dissertation on the *Other* Great Imitator" by Dr. William Walsh.

Refreshments were served on the lanai.

SAMUEL L. YEE, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The monthly meeting of the Kauai County Medical Society was called to order at 7:45 p. m. by President P. M. Cockett on May 12, 1948 at the Wilcox Memorial Hospital in Lihue, T. H.

Those present were Drs. Bickell, Boyden, Brennecke, Chisholm, Cockett, Fujii, Goodhue, Ishii, Liu, Mason, and Wade.

Drs. E. A. Bickell, C. H. Ishii and J. R. Mason were unanimously elected as members of the Kaui County Medical Society.

President Cockett brought to the attention of the members present that action should be taken on the cancer questionnaire. It was moved by Dr. Brennecke and seconded by Dr. Fujii that this questionnaire should be accepted as a form on all cases of cancer, which would be completed by the physician and the Territorial Board of Health nurse. This form is to be begun when the diagnosis of cancer is made. Dr. Cockett requested that the Secretary communicate with Dr. Quisenberry requesting more information on the cancer questionnaire and the possibility of establishing a cancer clinic on Kauai.

Dr. Cockett spoke about the question of establishing a blood bank on Kauai and the willingness of the East Kauai Lions to aid in sponsoring this. It was moved by Dr. Brennecke and seconded by Dr. Wade that a committee be appointed to investigate the blood bank set-up. Dr. J. A. Mason was appointed as chairman of the Kauai blood bank by President Cockett.

The matter of contributions of patients who have had psychiatric consultations with Dr. Lynn was discussed. The members present agreed that the physician who requests the consultation should collect a fee compatible with the patient's income to be used for the purchase of psychiatric materials needed on Kauai.

Dr. Brennecke, the Kauai County Medical Society delegate to the Territorial Medical Association convention in Honolulu, T. H., reported on the discussions

of Medical Economics, Government Physicians and fee schedules.

The question of the allocation of funds by the Territorial Board of Health to establish a laboratory on Kauai for the diagnosis of cancer was discussed. No action was taken, however.

WILLIAM W. GOODHUE, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Maui County Medical Society was held at the Maui Grand Hotel at 7 p. m. on April 20, 1948, with Dr. Kanda presiding.

Members present were Drs. Fleming, Shimokawa, Cole, Burden, Beland, St. Sure, Sanders, Kanda, Patterson, Underwood, Dunn and McArthur; visitors were Drs. Haywood, Toney and Kashiwa.

The following committees were appointed:

A. Medical Disaster Committee—Dr. McArthur, Chairman; Drs. Frank St. Sure, Jr., Tompkins, Burden, Shimokawa.
B. Medical Economics and Public Relations Council—Dr. St. Sure, Chairman; Drs. Sanders, K. Izumi, Underwood, E. Kushi, Rockett.
C. Program Committee—Dr. William Patterson, Chairman; Drs. Cole and H. Kushi.
D. First Aid for County Fair—Dr. James Fleming, Chairman; Dr. Fleming will assign the hours of individual physician coverage at fair.
E. First Aid—4th of July Celebration—Dr. E. Kushi, Chairman.
F. Publicity Committee—Dr. Underwood.
G. Library—Dr. A. Y. Wong.
H. Annual Picnic—Drs. Sanders and Burden.

There was lengthy discussion of the roll of the American Red Cross and the American Association of Blood Banks in the establishment of blood banks in general and on Maui in particular. It was the consensus of opinion that the less the Red Cross had to do with it better off we would be. It was suggested that some civic organization such as the Chamber of Commerce, Kiwanis, etc. sponsor a central registry of donors under the direction of the County Medical Society. This is now in operation in Lahaina under the auspices of the Lions Club. No motion was made at this time.

Dr. Sanders gave his report on the last Councillors Meeting in Honolulu. Several topics were presented as follows:

The government physicians on Kauai had unanimously agreed to resign their positions, providing that the majority of the other county physicians also resigned. They recommended a fee for services and professional care of welfare with indigents having free choice of physicians from among the members of the County Medical Society. They further recommended that the administrative duties of the government physician as registrar should be performed by an assistant registrar for a fixed salary. Dr. Toney explained the ideas of the Kauai government physicians and the reason for bringing this matter up. The main cause for complaint seemed to be in the Child Welfare Clinics. Mothers who paid a private doctor for delivery were bringing their children to the government physician for their monthly examination and innoculation when they could very well afford to pay a private doctor. In the discussion it was brought out that this habit was being fostered by the District Nurses who were advising mothers to patronize these clinics in order to bring up their statistics on the number of patients treated. There was considerable discussion pro and con but no decision was reached.

The Pan Pacific Surgical Conference is being held in Honolulu the end of August. It was suggested that an attempt be made to have one of the visiting speakers come to Maui to give a talk. This was deferred until a later date until the program of the meeting is announced definitely.

All county societies are urged to appoint Medical Disaster Committees. Committees are to arrange for surgical, triage teams, inventory medical supplies on hand and arrange for evacuation of present hospitals to safer sites in case of disaster. This committee has been appointed for Maui.

It has been suggested by Dr. H. M. Patterson of Honolulu that the Territorial Medical Association make an annual award to one of its members for outstanding achievement. This was discussed and fully approved by this Society and the delegate instructed accordingly.

It was moved by Dr. Cole that Dr. McArthur should compose a letter of commendation for the Society, to Dr. Harry Arnold, Sr. for the assistance he gave the Maui O. C. D. during the war and that this letter be incorporated in the delegate's report to the Territorial Association. Seconded by Dr. Fleming and carried unanimously.

EDWARD B. UNDERWOOD, M.D.
Secretary

NOTES AND NEWS

DR. AND MRS. FRED LAM, JR., of Honolulu, are the parents of a son, Fred III, their first child, born on May 29 at The Queen's Hospital. Dr. Lam is finishing his interneship at Queen's and will continue as one of the residents for the next year.

DR. AND MRS. LOUIS GASPAR, of Honolulu, are the parents of a daughter, Margaret Isabel, born at the St. Francis Hospital on May 24. They now have three daughters and one son.

THE QUEEN'S HOSPITAL announces the addition of a number of new internes and residents, as follows: *Internes:* Dr. Edwin B. Adams, a native of Burlington, Vermont, is a graduate of the University of Vermont School of Medicine in 1948; Dr. William S. Hatt, son of DR. NELSON HATT, of Honolulu, is a graduate of the Harvard Medical School, 1948; Dr. Walter S. Strode, son of DR. JOSEPH E. STRODE, of Honolulu, is a graduate of the Washington University School of Medicine in St. Louis, in June, 1948; Dr. Duane D. Warden, a native of Grant City, Mo., is a graduate of the Washington University School of Medicine in 1948; Dr. Howard E. Milliken, a native of Harrisburg, Pa., is a graduate of the University of Pennsylvania School of Medicine in 1948; Dr. Alma C. Johnson, a native of Ontario, Oregon, is a graduate of Northwestern University Medical School in 1947; Dr. Joseph A. Jachimczyk, a native of Stamford, Conn., is a graduate of the University of Tennessee Medical School in 1948; Dr. John S. Horan, a native of Seattle, Washington, is a graduate of the University of Tennessee in 1947; Dr. Marion L. Hanlon, a native of Chicago, Ill., is a graduate of Northwestern University Medical School in 1947; Dr. James G. Harrison, a native of Mt. Airy, North Carolina, is a graduate of the Duke University Medical School in 1947; Dr. Warren L. Wong, a native of Honolulu, is a graduate of the New York University School of Medicine in 1948; Dr. Kenneth H. Rusch, a native of Manitowoc, Wisconsin, is a graduate of the University of Illinois Medical School in 1948. *Residents:* Dr. Peter Kim, a native of Sacramento, Calif., was graduated from the Marquette University Medical School in 1943 and interned at the Kern General Hospital, Bakersfield, Calif., and served in the Army of the United States, is an assistant resident in medicine; Dr. Timothy F. Lally, a native of San Francisco, Calif., who was graduated from the Creighton University Medical School and interned in the U. S. Marine Hospital in San Francisco, served in the Navy and is now assistant resident in radiology; Dr. Judson B. McClanahan, a native of Charlottesville, Virginia, was graduated from the Medical College of Virginia in 1947 and is now an assistant resident in pathology; Dr. William G. Baldwin, a native of Maui, who was graduated from Creighton University Medical School in 1947 and served an interneship in St. Mary's Hospital, San Francisco, is an assistant resident in mixed medicine; Dr. Gustav S. Bieber, a native of Wilmington, N. C., who is a graduate of Duke University Medical School in 1943, is assistant resident in obstetrics and gynecology; Dr. Raymond M. DeHay, a native of Honolulu, who was graduated from the University of California Medical School in San Francisco in 1945 and served in the U. S. Navy, is now an assistant resident in mixed medicine; Dr. Andrew L. Morgan, son of DR. JAMES MORGAN, of Honolulu, who was graduated from the Cornell University Medical School in 1945 and served in the Army of the United States, is an assistant resident in surgery; Dr. James Marnie, a native of Maui, who was graduated from the Jefferson Medical College in Philadelphia in 1945 and interned at The Queen's Hospital, has returned from service in the Army of the United States to become an assistant resident in surgery.

Former internes at The Queen's Hospital are now located as follows: DR. CLAIR D. CAVANAUGH is at Honokaa Plantation Co., Hawaii; DR. ERNEST A. BICKELL is at Kilauea Plantation Co., Kauai; DR. FRANK E. DARROW is at the Laupahoehoe Sugar Plantation Hospital, Hawaii; DR. FRANCIS Y. K. LAU is in the Army, stationed at Tripler General Hospital.

DR. AND MRS. ROBERT F. BAILEY, of Honolulu, became the parents of their second child, a son, on May 19 at The Queen's Hospital. He has been named James Radcliffe.

DR. WILLIAM SIMPSON, who recently completed a residency at the Kapiolani Hospital, Honolulu, was married to Miss Dorothy Flaniken of Memphis, Tennessee, at the First Methodist Church, Honolulu, on June 16.

Among those attending the A.M.A. meeting in Chicago in June were DR. F. J. PINKERTON, delegate, and DR. ALFRED S. HARTWELL, alternate delegate, DR. JOSEPH PALMA, DR. FREDERICK GILES and DR. EDMUND L. LEE. The latter two are also attending the meeting of the American College of Chest Physicians.

DR. AND MRS. JOSEPH E. STRODE, of Honolulu, have returned following a mainland trip. They were present at the graduation of their son, Dr. Walter S. Strode, from Washington University Medical School, in St. Louis.

DR. THOMAS S. MIN, of Honolulu, has opened his offices for practice of medicine and surgery at 1230 S. Beretania St. Dr. Min, who is a graduate of the Jefferson Medical College in Philadelphia in 1942, took his interneship at the Reading, Pa., General Hospital and had a residency in medicine at this hospital prior to entering the Army of the United States, in which he served in Europe for three years. Following his discharge he studied at the School of Tropical Diseases at Tulane University for six months and has served in a resident capacity in the Leahi Hospital and the St. Francis Hospital in Honolulu.

DR. EDWARD T. MATSUOKA, a native of Olaa, Hawaii, has opened his offices for the practice of medicine and surgery at 1230 S. Beretania St. Dr. Matsuoka was graduated from the Medical College of Virginia, in Richmond, in 1941 and served an interneship at the Wayne County Hospital, Detroit, Michigan. Following this he was in the Army of the United States as a Captain for three years during which time he was in the European Theatre. He has recently completed one year of mixed residency at the St. Francis Hospital, Honolulu.

DR. K. S. TOM, of Honolulu, has completed the examinations in the American Board of Obstetrics and Gyne-

cology and has been certified as a specialist in that field.

DR. AND MRS. WILLIAM M. WALSH, of Honolulu, are the parents of a second son, James Ross, born on June 16 at the Kapiolani Maternity Hospital.

DR. AND MRS. A. L. VASCONCELLOS, of Honolulu, are the parents of a son born June 26 at the St. Francis Hospital.

DR. MARCUS GUENSBERG, Medical Director of the Territorial Hospital, has just returned from a two months' trip to the Mainland where he visited numerous mental hospitals including the Menninger Foundation in Topeka, Kansas. He also attended the Annual Convention of the American Psychiatric Association in Washington, D. C. Dr. Guensberg also passed the Board in Psychiatry and he is now certified by the American Board of Psychiatry and Neurology.

DR. AND MRS. H. L. ARNOLD JR. returned June 21 from a four months' trip to the Mainland. They spent two weeks in Mexico, where Dr. Arnold visited dermatologists and leprosaria in Guadalajara and Mexico City and two weeks in Cuba, where he attended the Fifth International Leprosy Congress. There he read a paper on the use of the sweat response to Mecholyl in the diagnosis of leprosy, and also served as one of the two representatives of the U. S. A. on the Committee on Classification and Nomenclature. They then returned via Guatemala to Coronado, California, where Dr. Arnold read a paper on the macules of leprosy before the American Dermatological Association; and from there they drove east, visiting doctors in Dallas, New Orleans and Charlotte. Dr. Arnold then attended the Fourth International Congresses on Tropical Medicine and Malaria in Washington, D. C., as a delegate from the American Dermatological Association.

The Kapiolani Maternity and Gynecological Hospital, Honolulu, has appointed DR. GAIL LI, son of DR. MIN HIN LI, of Honolulu, to the residency in obstetrics and gynecology. Dr. Li recently completed his interneship at The Queen's Hospital. Dr. Edward S. Ludwig, a graduate of the Ohio State University Medical School, has also been appointed to the residency staff.

DR. ROBERT B. FAUS, of Honolulu, recently returned from a Mainland visit during which he attended the meeting of the Ogden, Utah, Surgical Society, and clinics at the University of California. On his return he attended the National Guard encampment at Schofield Barracks in his capacity as Commanding Officer of the Medical Detachment for the Territorial National Guard, with the rank of colonel.

The St. Francis Hospital, Honolulu, has secured the services of Dr. Carl E. Johnsen, Jr., as physician anesthetist for the hospital. Dr. Johnsen is a graduate of the University of Wisconsin Medical School in 1943 and served an interneship at the Evanston Hospital, Evanston, Illinois. While serving in the Army Medical Corps he devoted two and one half years to anesthesia, including a course in basic anesthesia at the Walter Reed Hospital. He served in the Pacific and was a service member of the Honolulu County Medical Society during the war. After his discharge from the Army he was resident in anesthesia at the Evanston Hospital for 18 months before returning to Honolulu. Dr. Johnsen is a member of the American Society of Anesthesiologists, Inc., and has completed the first part of the examinations of the American Board of Anesthesiology.

Kauai

DR. EICHI MASUNAGA, of Hanapepe, has taken a Mainland trip for post-graduate study as well as to attend the A.M.A. meeting in Chicago.

DR. CLYDE ISHII, of Kekaha, has opened an office in Lihue for the practice of medicine and surgery.

DR. JAMES MASON, who was formerly with the U. S. Public Health Service in China, is now associated with DR. SAM WALLIS, in Lihue. Dr. Mason is a graduate of the Yale University Medical School and interned at the Marine Hospital in New Orleans.

DR. WILLIAM GOODHUE, of Kapaa, attended the annual National Guard encampment at Schofield Barracks in June, along with the Kauai unit.

DR. E. A. BICKELL has replaced DR. WILLIAM E. TONEY as Kilauea Plantation physician.

Hawaii

DR. RICHARD A. YAMANOHA, a native of Hilo, has opened offices in Hilo for the practice of obstetrics and gynecology. He was graduated from the Tulane University Medical School in 1944 and interned at the Cambridge City Hospital, Massachusetts, followed by residences at the St. Joseph Hospital and the City Hospital in Parkersburg, West Virginia, followed by a residency in obstetrics and gynecology at the Chicago Maternity Center in 1947-48. Dr. Yamanoha is a diplomate of the National Board of Medical Examiners.

DR. AND MRS. L. L. SEXTON, of Hilo, flew to the Mainland recently on the first direct Hilo-San Francisco Mainliner flight.

DR. AND MRS. L. R. FERNANDEZ, of Laupahoehoe, are taking an extended Mainland trip. DR. FRANK DARROW is taking his practice during his absence.

DR. JOSEPH E. MALLOY, of the resident staff of the Puumaile Hospital, Hilo, and Miss Ruth Hopton, of Pepeekeo, were married on June 9.

DR. WILLIAM BERGIN, of Pepeekeo, has returned from an extensive tour of the Mainland.

Molokai

DR. NORMAN R. SLOAN, medical director of the Kalaupapa Hospital and Settlement, has returned from a three-month trip to Havana, Cuba and to the Mainland. While in Havana he attended the International Congress on Leprosy. He visited the National Leprosarium at Carville, Louisiana, and also attended the Fourth International Congresses on Tropical Medicine and Malaria in Washington, D. C.

Maui

DR. AND MRS. R. J. MCARTHUR, of Wailuku, Maui, are the parents of their first child, a son, born June 18.

DR. AND MRS. LESTER T. KASHIWA, of Wailuku, Maui, are the parents of a son, George Katsumi, born June 2 at Malulani Hospital.

Biological Photographic Association, Inc.

This association is holding a meeting in Philadelphia, September 8-10. There will be an interesting exhibition of prints, color transparencies and motion pictures in the field of biological photography. For further details, write to Secretary, Biological Photographic Assn., University Office, Magee Hospital, Pittsburgh 13, Pa.

Academy-International of Medicine

This society has available a catalogue of professional motion picture films of surgical, medical and dental films. This is a complete list and is alphabetized as to classification and titles. This is available while the supply lasts without charge from the Academy-Inter-

national of Medicine, Department of Audio-Visual Aids, 214 West Sixth Street, Topeka, Kansas.

Honolulu Obstetrical and Gynecological Society

At the May meeting of this Society a talk was given by Dr. Henry Buxbaum, associate professor of obstetrics at the Northwestern University Medical School, on the subject of "Prolonged Labor."

The June meeting was addressed by DR. S. NISHIJIMA of Honolulu on the subject of "Mid-Pelvic Plane Dystocia" and DR. JANET BOOG, director of the Maternal and Child Health Bureau of the Territorial Department of Health, gave a paper on "Maternal Mortality in the Territory of Hawaii."

Resume of Health Department News

DR. YAN TIM WONG joined the Bureau of Mental Hygiene of the Health Department recently as assistant chief and child psychiatrist.

Dr. Wong received his B.S. degree from Yenching University in Peiping. He received his medical training at Peiping Union Medical College after which he served as assistant physician in neuro-psychiatry at the college. After being in private practice for 18 months in Peiping, Dr. Wong was appointed chief resident physician for three and a half years at Gailor Hospital in Memphis, Tennessee.

DR. JAMES R. ENRIGHT, chief of the Bureau of Epidemiology of the Health Department, will leave in July for the First International Polio Conference in New York, July 12 to 17.

Dr. Enright has been invited to take part in a special discussion panel at the conference.

Returning recently from the Western Branch of the American Public Health Association Conference in Salt Lake City was DR. PAULINE STITT, assistant chief of the Bureau of Maternal and Child Health and Crippled Children of the Health Department.

WOMAN'S AUXILIARY

Mrs. Frank C. Spencer was elected president of the newly-formed Woman's Auxiliary to the Hawaii Territorial Medical Association at a meeting held Tuesday, June 22, at 9:30 a.m. in the Lounge of the Mabel Smyth Building. Other officers elected are: President-elect from Hawaii, Mrs. William Bergin, Pepeekeo, Hawaii; Vice Presidents: Mrs. William Patterson, Puunene, Maui, and Mrs. Sam Wallis, Lihue, Kauai; Recording Secretary, Mrs. Richard Chun; Corresponding Secretary, Mrs. Robert Johnston; and Treasurer, Mrs. Kyuro Okazaki, all from Honolulu.

Mrs. Laurence Wiig, who has been serving as temporary chairman during the organization period, presided. Members of the Nominating Committee were Mrs. Douglas Bell, chairman; Mrs. Kwan Heen Ho, Mrs. Maurice de Harne, Mrs. Homer Izumi, and Mrs. C. W. Trexler.

Mrs. Wiig announced that much interest is being shown by the physicians' wives on the outer islands. Meetings have been held on Hawaii, Kauai and Maui. Present at this meeting were Mrs. W. H. Wilkinson of Lanai City, Lanai, and Mrs. William Patterson, president of the newly formed Woman's Auxiliary to the Maui County Medical Society. Other officers of the Maui Auxiliary are: Vice President, Mrs. Harold Kushi, Kahului; Secretary and Treasurer, Mrs. A. J. Beland, Waiakoa; Corresponding Secretary, Mrs. Mamoru Tofukuji, Wailuku; and Mrs. W. T. Dunn of Lahaina is the Auditor.

Mrs. Wiig and Mrs. Edith C. Bennett, Executive Secretary of the Hawaii Territorial Medical Association, were given a vote of thanks for their help in organizing this Auxiliary.

Wives of the doctors will be notified by mail of the next meeting of the Auxiliary.

Hawaii Physicians' Art Association Honolulu, Hawaii

The first annual exhibit of the Hawaii Physicians' Art Association was held in the library of the Mabel Smyth Building in conjunction with the annual meeting of the Territorial Medical Association May 6 through 9. Thirty objects of art were entered consisting of oil and watercolor paintings, pastels, woodcarving, photography, aquatints, etc. An excellent exhibit of Kodachromes was presented by various doctors and arranged by Dr. Cloward.

A unanimous ballot was cast in favor of future exhibits by those attending the meeting.

Dr. Larsen received first prize for his aquatint "Torch Fishing" and second prize for his oil painting "Olomanu." Dr. Benz was a close third. Dr. Myers and Dr. Cloward were fourth and fifth, respectively.

It seems to be the consensus of everyone that the exhibit was a valuable addition to our annual Territorial Medical meeting, and that another physicians' art show should be incorporated into our Territorial meeting next year.

Respectfully submitted,
W. B. HERTER, M. D.
Secretary.

Honolulu Surgical Society

This Society held a meeting on June 11 at the Mabel Smyth Building under the chairmanship of Dr. Rogers Hill, at which surgical papers were presented as follows for the visiting members of the Southern Society of Clinical Surgeons:

Surgery in Hawaii—Dr. Rogers Lee Hill
Leiomyoma of the Jejunum—Dr. James Cherry
Arteriovenous Fistula of the Lung—Dr. Robert Johnston
Resection of the Colon—Dr. Verne C. Waite
Leprosy: Illustrated with slides—Dr. Harold Johnson
Pediatric Surgical Problems—Dr. Laurence Wiig
Total Pancreatectomy—Dr. L. A. Honl

The next meeting of the Society will be held in July at which time election of officers will be held as well as a scientific session. The dues for the current year in the amount of $10.00 are now due and payable to the treasurer, DR. LAURENCE M. WIIG, or to Mrs. Bennett's office, Mabel Smyth Building. For the information of any new physicians, membership in this Society is open to any practicing physician who pays the annual dues of $10. Anyone wishing to present a paper at any time or has any suggestions for programs is asked to consult with the Program Committee, DR. GROVER BATTEN, DR. HILL, or DR. WIIG.

OBSTETRICIANS' MEETING

The Sixteenth Annual Meeting of the Central Association of Obstetricians and Gynecologists is to take place in Denver, Colorado on September 23, 24 and 25, 1948.

The Shirley-Savoy Hotel is the Convention Headquarters and the Executive Committee will meet there on Wednesday, September 22, just preceding the Annual Meeting.

CALLING ATTENTION TO Items of Possible Interest to Friends of Chauncey D. Leake

April, 1948

1. POLICY: New format in deference to presbyopic tendencies of older readers. No references ordinarily to articels in *Journal American Medical Association,* since assumption is that all readers of this read that regularly. Ditto for *Texas Reports on Biology and Medicine.* Highly technical articles are noted only when results appear to have far-reaching significance. Punctuation abbreviated to conserve space and promote easy reading.

2. CULTURAL? G. Jefferson raises some interesting questions in his Scepsis Scientifica (*Brit. Med. J.* 1:379, Feb. 28, '48). F. T. Gardner is broadly amusing in her "Bells Toll for Primes: An Inquiry into the Fate of William the Conqueror" (*Surg. Gyn. & Obs.* 86:377, '48). L. H. Butterfield describes Benjamin Rush (1745-1813) as promoter of useful knowledge (*Proc. Amer. Philosoph. Soc.* 92:26, '48). Fittingly appropriate in Ward Ritchie composition is E. Belt, K. T. Steinitz and Mr. Archer's *Manuscripts of Leonardo da Vinci: Their History with a Description of the Manuscript Editions in Facsimile* (Elmer Belt Library of Vinciana, Los Angeles, '48, 70 pp.). D. L. Miller analyses the effect of evolutionary concepts on scientific method (*Philosoph. Sci.* 15:52, '48). L. C. Strong and E. L. McCawley verify 16th Century use of oil of spindle (Euonymus europaeus), honey and pitch, decoded from Voynich Mss, as contraceptive (*Bull. Hist. Med.* 21:898, '47). M. Denny gives letters to Linnaeus from Alexander Garden from Charleston, S.C., between 1755 and 1773; gardenia named for him and he probably inspired W. C. Wells (1757-1817), pioneer metereologist and evolutionist (*Isis* 38:161, '48). M. Grene exposes absurdities and recognizes valid contributions of existentialists Sartr, Heidegger, Kierkegaard, Marcel and Jaspers (*Dredful Freedom: A Critique of Existentialism,* Univ. Chicago Press, '48, 150 pp., $2.75). Important are H. Simons' posthumous essays *Economic Policy for a Free Society* (Univ. Chicago Press, '48, 353 pp., $3.75). P. Schrecker philosophizes on *Work and History* (Princeton Press, '48, 350 pp., $5).

3. PHARMACOLOGICAL? T. H. Jukes and E. L. R. Stokstad survey pteroylglutamic acid and related compounds (*Physiol. Rev.* 28:51, '48). H. Speert discusses local action of sex hormones (*Ibid* p. 23). F. J. Stare & Co. continue studies on fat emulsions for intravenous nutrition (*J. Lab. Clin. Med.* 33:143, '48). L. P. Garrod emphasizes bactericidal action of streptomycin (*Brit. Med. J.* 1:382, Feb. 28, '48). B. A. Rubin reports on trypanocidal effects of antibiotic lactones (*Yale J. Biol. Med.* 20:233, '48). G. I. M. Swyer observes antihistamine effect of Na salicylate and its antagonism to snake venom capillary damage (*Biochem. J.* 42:28, '48). M. R. Castex, L. E. Camponovo and F. E. Labout recommend 5cc 1% succinic acid IV as useful respiratory stimulant (*La Prensa Med. Argent.* 35:195, Jan. 30, '48). P. Fantl and M. H. Nance describe a heat labile globulin prothrombin accelerator (*Med. J. Austral.* 1:128, Jan. 31, '48). G. Calcutt and J. P. Newhouse find cysteine and serine inhibit photodynamic action of benzpyrine (*Nature* 161:53, Jan. 10, '48). S. C. Bukantz and G. J. Dammin suggest fluorescein in skin tests as indicator of antihistamine action (*Science* 107:224, Feb. 27, '48). R. G. Horton & Co. show high potential skin toxicity of benzene hexachloride ("Gammexane") as insecticide in clothing (*Science* 107:246, March 5, '48). G. L. Hobby & Co. discuss procaine penicillin (*Proc. Soc. Exp. Biol. Med.* 67:6, '48). D. Scherf finds fagarine (fr Argentine Fagara coco) effective in controlling auricular fibrillation (*Ibid* p. 59).

4. NOTABLE? D. M. Horstman discusses epidemiology of polio (*Lancet* 1:273, Feb. 21, '48). R. Mosera notes marked rise of systolic blood pressure in asthmatic attacks (*Arch. Uruguay Med. Cir. Esp.* 30:605, '47). Note important symposium on lactation and milk by K. C. Richardson, J. H. Burn & Co. (*Brit. Med. Bull.* 5:120, '48). W. Baumgartner describes phagacytosis of red cells (*Helv. Med. Acta* 15:61, '48). Excellent is C. W. Walter's *Aseptic Treatment of Wounds* (MacMillan, N. Y., '48, 372 pp., $10). S. Cobb well reviews century's development in neurology, psychiatry and neurosurgery (*Arch. Neurol. Psychi.* 59:63, '48). W. H. Mathews recommends examining sputum for tumor cells in suspected lung cancer (*Canad. Med. Asso. J.* 58:236, '48). F. Hawking describes tissue culture of Leishmania Donovani (*Trans. Roy. Soc. Trop. Med. Hyg.* 41:545, '48). Q. H. Gibson analyses enzyme systems in red cells responsible for reduction of methb. (*Biochem. J.* 42:13, '48). D. C. Darrow discusses electrolyte metabolism in man (*Bull. N. Y. Acad. Med.* 24:147, '48). N. W. Shock describes metabolism in old age (*Ibid* p. 166). R. Doerr offers 2 vols. *Die Immunitatsforschung,* Bd. 1 *Antikorper,* Bd. 2 *Komplement* (Springer, Wien, 268 and 79 pp., '47, SwFr 32). H. T. Clarke, J. R. Johnson and R. Robinson edit NAS *Chemistry of Penicillin* (Princeton Press, '48, 1200 pp., $30). Sympathy to A.M.A. on printing troubles!

May, 1948

1. CLINICAL: J. C. Waterlow discusses *Fatty-Acid Disease in Children* (Med. Res. Council Rep., 263, London, '48, 2s2d). M. Zehnder describes diagnostic use of vasokymogram in studying passage of fluid on same x-ray film (*Helv. Clin. Acta* 15:65, '48). I. J. Wood & Co. discuss biochemistry and histology of hepatitis (*Med. J. Austral.* 1:249, Feb. 28, '48). A. C. Corcoran, R. D. Taylor and I. H. Page review functional patterns in renal disease (*Ann. Int. Med.* 28:560, '48). H. Rasmussen and G. Nyhus describe EKG in mitral stenosis (*Acta Med. Scand.* 129:446, '48). V. H. Moon surveys the pathology of secondary shock (*Am. J. Path.* 34:235, '48). Our A. H. Gamble, H. F. Wiese and A. E. Hansen note possible cardiac effect of hypokalemia in prolonged diarrhea (*Pediatrics* 1:58, '48). Our A. Ruskin, O. W. Beard and R. L. Schaffer report on blast hypertension in Texas City disaster patients (*Am. J. Med.* 4:228, '48). P. Heinbecker offers his idea of pathogenesis of diastolic hypertension (*Surgery* 23:618, '48).

2. MICROBIOLOGICAL AND ANTIBIOTICAL: M. S. Marshall offers *Applied Medical Bacteriology* (Lea & Febiger, Phila., '48, 340 pp., $4.50). S. D. Elek describes methods for in vitro recognition of toxigenic bacterial strains (*Brit. Med. J.* 1:493, March 13, '48). E. F. Gale discusses synthesis of proteins by micro-organisms (*Chem. Indust.* 9:131, Feb. 28, '48). W. van Iterson reports electron microspial findings on bacterial cytology (*Biochem. Biophys. Acta* 1:527, '48). I. M. Dawson and A. S. McFarlane describe structure of vaccinia virus (*Nature* 161:464, March 27, '48). D. J. Bauer suggests xanthine oxidase and pyruvic dehydrogenase are essential for virus growth (*Brit. J. Exp. Path.* 28:440, '48). G. M. Richardson suggests relation between World War I use of mustard gas and influenzal epidemic of '18 (*New Zealand Med. J.* 47:4, '48). R. K. Callow & Co. report antibiotic for bacillus lichenformis

active vs M. tuberculosis, but may injure kidney (*Brit. J. Exp. Path.* 28:418, '48). R. M. Smith & Co. report biological studies on chloromycetin (*J. Bact.* 55:425, '48). G. E. Boxer & Co. describe chemical estimation of streptomycin in blood, finding it proportional to dosage with rate of decrease proportional to concentration (*J. Pharmacol.* 92:226, '48). R. Pratt and J. Dufrency give cytochemical interpretation of mechanism of penicillin action (*Bact. Rev.* 12:79, '48). G. Rake discusses streptomycin as an essential nutrilite (*Proc. Soc. Exp. Biol. Med.* 67:249, '48).

3. PHARMACOLOGICAL: C. S. Jang & Co. note antimalarial action of Dichroa febrifuga (Chang Shan) root, due to quinazoline derivative (*Nature* 161:400, March 13, '48). B. Ekman says Ascorbic acid and cucumber are helpful in chronic benzene poisoning (*Acta Pharmacol. Tox.* 3:261, '47). G. Brownlee & Co. describe sulphetrone, a diamino-diphenyl-sulphone, as useful in tuberculosis (*Brit. J. Pharmacol.* 3:15, '48). K. Bailey and S. V. Perry discuss role of sulphydryl in interaction of myosin and actin (*Biochem. Biophys. Acta* 1:506, '47). In appraising carminative, S. Alstead and J. F. Patterson conclude pituitrin IM is best for flatulence, provided rectum is empty (*Lancet* 1:437, March 27, '48). R. Carratala studies clinical and experimental toxicity of aspirin (*La Prensa Med. Argentina* 35:231, Feb. 6, '48). L. Biro shows B Complex favorably influences adrenal insufficiency in infections (*Schw. Ztschr. Path. Bact.* 11:59, '48). C. Heymans and G. R. Vloeschhonwer describe phenyl-cyclopentane cmpd., "parpanit" as active broncho and enteric spasmolytic agent (*Arch. Internat. Pharmaco. Therap.* 75:307, '48). R. Parmentier and P. Dustin discuss mitotic poisoning and radimimetic action of hydroquinone (*Nature* 161:527, April 3, '48). S. S. Kety & Co. find nitrous oxide solubility same in blood and brain (*J. Biol. Chem.* 173:487, '48). E. Boyland reviews chemical carcinogenesis and cancer chemotherapy (*Yale J. Biol. Med.* 20:321, '48). L. W. Roth & Co. describe pyridyl-thenyl cmpd., "thenylene" as potent non-toxic anti-histamine agent clinically useful in allergy (*Arch. Internat. Pharmaco. Therap.* 75:362, '48). G. Lehman reports on antihistamine action of "thephorin" new pyridindene derivative (*J. Pharmacol.* 92:249, '48). Note symposium on insecticides in relation to food production (*Indust. Eng. Chem.* 40:673, '48). K. P. DuBois & Co. report rodenticidal action of "castrix", a chloro pyrimidine (*Proc. Soc. Exp. Biol. Med.* 67:169, '48). D. I. Macht reports phytopharmacological experiments on urethane (*Ibid* 237).

4. NEUROLOGICAL: G. Weddell & Co. note association of unpleasant pain reactions from skin with reduction in usual peripheral pattern of nerve distribution (*J. Neurophysiol.* 11:99, '48). M. A. Rothenberg & Co. show by tagged N that acetylcholine does not pass across nerve membrane, allowing no escape during conduction, limiting pharmacological action to synapse (*Ibid* 110). J. Piatt discusses form and causality in neurogenesis (*Biol. Rev. Cambridge Philosoph. Soc.* 23:1, '48). W. E. L. Clark and W. E. Russell discuss form and function of frontal lobes (*Lancet* 1:353, March 6, '48). H. B. Shumacker & Co. review causalgia and vasomotor disturbances (*Surg. Gyn. Obs.* 86:452, '48). J. T. Roberts reports on role of vasa nervorum (*Am. Heart J.* 35:369, '48). A. J. Arieff & Co. analyse complicated emotions in neighborhood quarrels (*J. Nerv. Ment. Dis.* 107:62, '48).

REMINISCENCES OF DECEMBER SEVENTH: VI

On July 10, 1947, I interviewed Dr. Frank Spencer concerning his experiences on December 7, 1941.

Dr. Spencer stated that he first heard of the attack a few minutes after 8 o'clock when a friend called him to inform him of it. He said he was not surprised as he had anticipated things would come to a head. The child of a junior navy officer had stayed at their house that night and he took her to her home on Kahala Avenue where he picked up her father, whose car had run out of gasoline, and pushed him to a service station near Kuhio Beach. He could see the smoke rising from Pearl Harbor and the planes diving in, although he was not able to identify the planes at that distance. He said there were some ships off Waikiki which he thought were navy ships and that every once in a while a geyser of water would go up near these ships. He drove home as he had been briefed to do and was called there between 9 and 9:30 and told to report to Ft. Shafter. He proceeded to Ft. Shafter and stated that he was surprised at how clear the streets were. He said that the "society cops" were on duty and doing a good job. He stated that Porter Dickenson was on duty at School and Nuuanu directing traffic and was doing a very good job of it. In the Palama district people were congregated on the street corners but were keeping out of the streets proper. He said that the people of the community responded marvelously to the instructions to keep off the phone and out of the streets until after the military took over a few days later.

He reached Ft. Shafter about 10 A.M., reported to the officer of the day who told him that they were having a little trouble and that he was to give his name to a sergeant and then to stand by for one-half to one hour and if they needed him they would call him. Otherwise they appreciated his coming. So he followed instructions and found a group sitting around a sergeant. The group, he recalls, consisted largely of Orientals. After waiting about 15 minutes he and (he believes) Dr. Pang, walked to the admitting end of the hospital where the ambulances were discharging their cargoes. An army major inquired what he wanted and sent him to the barracks to help take care of the wounded. He stated that whoever was in charge of the evacuation of the Hickam area had done a masterful job; that every case had a dressing or a tourniquet and in case of fractures, a pillow splint had been applied and in some cases a board splint. The tourniquets were marked indicating the time for their release.

He worked with Dr. Culpepper and Dr. Pete Wilson, the dentist. They had nothing to work with, no scissors or adhesive and only rolls of unsterile gauze which they would fluff up and place on wounds. They made continuous rounds releasing the tourniquets as indicated and trying to evaluate the cases and send them to surgery in the order of their need. There was one death on the ward early in the day. He was served chicken and peas for lunch but had no appetite for them. After lunch he went to his office and got some instruments which he boiled in a large basin, placed the basin on a gurney and went around the ward closing superficial wounds after dusting them with sulfanilamide. Dressings meanwhile began to arrive, all of them of commercial makes. While he was dressing one soldier a plane zoomed down and Dr. Spencer looked up rather fearfully and the soldier said, "Don't worry, doc, it's a P-40."

By 3 o'clock all of the ward was completely taken care of and the patients were gradually being sent to surgery. One of Dr. Spencer's children had been on the other side of the Island Saturday night and he left Tripler about 3 P.M. and drove home prior to going to find her. She had just come in as he arrived home.

On the evening of December 7 he had to go to Queen's Hospital to attend a delivery. He had no headlights and was stopped in front of William's Mortuary where the caskets were piled high. At this point he was challenged by a sentry and produced his identification card and proceeded to the hospital. He remained in the hospital all night not wanting to run the risk of being shot. They were not allowed to have any lights in the hospital but a piece of blue cellophane was fastened over a spotlight and he proceeded to do a delivery and an episiotomy.

On December 8 he went to Tripler, going to the same barracks. He noticed a number of the beds were empty. An Army Major and Captain were making the rounds. The Captain asked him if he would like to do the dressings and he said that he would. The Captain explained that this would release him to do some other necessary

task. The Major interfered and commanded the Captain to remain at his duty so that they could get the wounds classified, as civilians used a different terminology from the Army. With this Dr. Spencer concluded his contacts with the war.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

Frank Spencer, M.D.

* * *

On July 25 I interviewed Dr. Thomas Richert.

He stated that on the morning of December 7 he was living in Nuuanu Valley on the Old Pali Road. He said he slept late but had gotten up and was still going around in his pajamas and bathrobe when he and his wife noted that there was exceptionally heavy firing and instead of the windows rattling as they had when anti-aircraft and even heavy guns were being fired, it was the ground that was shaking. He said to his wife that there was something unusual about this. At this time Dr. Harold Johnson, who was living in Kalihi, called him and stated he had taken Dr. Homer Izumi to the early morning Maui plane and that the field had been strafed and the war was on. Immediately after this they heard the approach of planes and went out and lay down on the lawn where they could fully observe any activity. He counted 23 planes, painted a very light blue, flying at 10-12,000 feet. His impression was that they were American planes coming from Kaneohe or Bellows. However, as they approached Pearl Harbor they peeled off and went into steep dives, and heavy explosions followed which were felt but not heard. He then proceeded to shave and dress and left for Queen's Hospital. Just as he was leaving home a dark brown plane came hedge-hopping down Nuuanu Valley at about telephone-pole height. This proceeded out over the harbor where it strafed some vessels in that neighborhood. About the time he had reached the Nuuanu Cemetery another Japanese plane of the same type came over, which was flying at a slightly greater height.

He reached Queen's Hospital just in time to see an ambulance bring in a group of people who had been injured when a car in which they were riding was struck either by bomb fragments or an anti-aircraft shell. Without seeing his patients at Queen's he left at once for Tripler General Hospital where he was supposed to report.

He reached Tripler about 8:50. He said there were no crowds in the street and he was not challenged at Tripler. He reported to the officer of the day and was assigned to one of the new wards and was instructed to set it up to receive casualties. He went to his ward and there were 30-32 beds set up without mattresses or pillows or any other equipment. Two enlisted men and a nurse were assigned to him to break out equipment. They searched for equipment but were unable to find any. About 9:30 a.m. some trucks began to arrive with supplies. These were dumped in front of the barracks—one would contain all mattresses and another nothing but sheets, so they had to go from point to point and pick up such material as they needed and carry it to the wards.

One nurse was also assigned to a ward, whose duty it was to set up trays. However, there was nothing to put on the trays.

About 9:30 or 10:00 trucks began to arrive carrying casualties to the wards. These were mostly of a minor nature and had evidently been well screened before arrival. He received one compound fracture of both bones of the leg. This was in a Thomas splint. Most of the casualties came from Hickam. Another casualty was the co-pilot of a plane which was flying in on the morning of December 7. As they came over the Islands they remarked about its looking as if they were having extensive maneuvers as a welcome. At that time a Japanese plane shot by them. Another came up under the belly of the ship and machine-gunned it. The only armament they had aboard was the two .45 revolvers carried by the pilot and co-pilot. The patient had caught one of the machine-gun bullets in the region of his elbow and it travelled subcutaneously down into the palm of the hand, at which point it was removed by Dr. Richert.

He finally took his corpsmen and a cardboard carton and went to the supply depot where there were large stores of equipment of all kinds. He was told these could only be obtained by filling out the proper orders; however, he went to the storeroom, taking out of the equipment such objects as he felt were useful. The corpsmen came back with other things, but were most happy to have a 32 oz. bottle of whiskey, which they proceeded to kill during the day. The nurse also came back with a 32 oz. bottle of whiskey.

Two of the patients had been playing tennis at the time of attack and one of them heard the swish of an approaching bomb and squatted down holding the tennis racket over his head. The bomb exploded on the court and he was peppered with black-top and was quite surprised when he pulled the racket down and found there was only the handle and throat in his hand, the head having completely disappeared.

About 3 in the afternoon he went into surgery where he began working and where he continued to work until 2-3 o'clock in the morning. They were told not to go out of the wards unless dressed in white and they were told to sing or whistle as they went as the guards had been ordered to shoot anyone on sight. When he arrived in surgery all of the sterile supplies had been used up, so they used the same gown and changed wet gloves between operations. A nurse was stationed at a long table on which the instruments, which were sterilized, were dumped, and when a man needed some tool he would go to the table and point out the instrument he wanted and receive it from the nurse. Half the time he was operating on a gurney with a corpsman giving drop-ether although some sodium pentothal was used. There were no casualties in the operating room on the cases on which he was working.

The army officers were not in the operating room but were screening the cases, sending the most severely injured into the surgery. Sometime during the day he was given some sandwiches and this happened again about 3 a.m. He tried to sleep but was unable to do so as the hospital was machine-gunned, and there was too frequent rifle fire on the grounds. However, he thinks there was a flight of our own planes which took off from Hickam Field about dawn of December 8 and our own batteries opened up on them. He continued to work on the morning of the 8th both in surgery and on the ward. He picked up two of his office nurses to take out to Tripler to help with dressings. Late on the afternoon of the 8th he went home to bed and returned to Tripler on the 9th. The ward which he had was never filled and there were only a few ambulatory cases left in the ward.

"I have read the attached report of my conversation and it is true to the best of my knowledge and belief."

Thomas Richert, M.D.

* * *

On August 22, 1947, I interviewed Dr. R. K. Uyeno, who lived near the corner of Nuuanu and Vineyard. He went to the Mabel Smyth Building where the lecture of Dr. Moorhead was scheduled to start at 9 o'clock. For perhaps close to an hour before Dr. Moorhead's lecture on December 7, 1941 Dr. Uyeno had noticed black and white puffs of anti-aircraft fire all through the sky but thought little of it and proceeded. He arrived sometime before 8:45 at about the same time as Dr. Hodgins came up saying, "The Japanese have attacked Pearl Harbor."

This seemed an impossibility to Dr. Uyeno. Shortly Dr. Marie Faus arrived confirming the report. The group stood outside the lecture hall watching the shell bursts. A little after nine about one-half of the group went into the lecture hall (the lecture was about 20 minutes late in starting) but there were no service personnel in the audience. Less than 10 minutes after the lecture started a call came for all service personnel to report to Tripler. However, none walked out. This call was repeated several times and about 9:45 there was a heavy explosion nearby which shook the whole building. A few moments later there was a call for all surgical teams to report to Tripler.

Dr. Uyeno drove ewa on Beretania Street and then mauka on Fort. He saw a very excited crowd on Kukui Street, between Fort and Nuuanu. He saw another excited crowd on Fort just above Vineyard. A third crowd was gathered in the neighborhood of his office. There he found the front lanai had been hit by an anti-aircraft shell and the wall of his reception room damaged. All doors were open and the place was a shambles. He completely forgot about going to Tripler as he rushed to find out how his family had fared. He found that his wife and family had, a few minutes before, gone from the lanai back to the fourth room from the front of the building, on the advice of a telephone call from his sister. Just after they reached the fourth room there was a heavy explosion at the corner of the house. Fragments of the shell had penetrated through the reception room through three double walls and out of the ceiling in the third room back. No member of his family was hurt. His drugs were all scattered over the floor. He found one fragment (about 1½" long by ¾" wide) of the shell which had gone into the third room. The point of entrance was about the size of the fragment but on the other side of the wall there was an opening about 8-10" in diameter and the lumber was shredded. Souvenir hunters were everywhere.

At this point his sister called again saying he was being called over the radio to report to Tripler. He left his family in the care of his sister and proceeded to Tripler where he reported to the desk and was sent to a general admission ward along with Drs. Gordon, Howarth and Fred Lam, and about ten others. He said he felt utterly helpless as he went into the ward and saw the ghastly wounds of war, as he had had no experience that would have prepared him for handling

these casualties. One patient had what he thought were a number of tiny scratches, but Dr. Gordon, a veteran of the first war, recognized them as machine-gun wounds. On this ward there were two bottles of iodine and two pairs of scissors. Bandages were exceedingly scarce and the group of them spent half their time hunting dressings.

In one ward most of the patients were in shock and were receiving serum but in their ward only one individual received serum and he died while it was being given. When examining one of his patients he picked a piece of bone about ½" long out of the man's ear. The man did not know it was there. He asked the patient how he had been hurt and he replied that he had been on an anti-aircraft battery which had been hit and that one of his buddies had been blown up and he supposed that was one of his bones!

By about 2:30 they had the ward pretty well cleaned up and he returned home. He continued to return to Tripler for several days and a few days later Dr. Benyas called him and asked him if he would help in surgery. He gave intravenous anesthetics and scrubbed with Dr. Gordon and Dr. Benz. On one of the days that he was helping, the sirens blew and word came that enemy planes were coming in. The orders coming over the loud speaker system were for everyone to take cover. They were operating at the time and he didn't know just what to do but Dr. Benz was very calm and said, "Well we have got a job to do here and we might as well do it." A few minutes later the all-clear sounded. He said the loud speaker system was very disconcerting when they were working in surgery as all orders were being given over it. So far as he could judge all of the work on the wards was being taken care of by civilian doctors and army orderlies. He worked at Tripler about a week but it was probably the second week before he began holding office hours.

He said that apparently one anti-aircraft gun fired a burst of contact shells, one of which exploded on Vineyard Street just ewa of Nuuanu, the next one got his office and the third one struck on Fort Street above Vineyard. A fourth shell fell on Kukui between Fort and Vineyard. The first shell caused one death and amputated the arms of a child. The third one caused a man to be eviscerated, while a fourth one killed a father and three children and blew off both legs of a boxer.

"I have read the above report of my conversation and it is true to the best of my knowledge and belief."

R. K. Uyeno, M.D.

Fifty-Eighth Annual Meeting
Hawaii Territorial Medical Association

MABEL L. SMYTH BUILDING,
Honolulu, Hawaii, May 6-9, 1948

The fifty-eighth annual meeting of the Hawaii Territorial Medical Association was opened in the Mabel L. Smyth Building with a joint meeting of the House of Delegates and membership. The following program was presented:

SCIENTIFIC PROGRAM

The Epidemiological Significance of the Behavior of Poliomyelitis by W. Lloyd Aycock, M.D. (by special invitation).

Statistics and Community Health by Nils P. Larsen, M.D.

Relation of Kona Weather to Eclampsia in Hawaii by Herbert E. Bowles, M.D.

Five Years of Heart Disease in Hawaii by Morton E. Berk, M.D. and A. S. Hartwell, M.D.

Brain Tumors in Hawaii (1938-1948): Statistical Review of 84 Verified Cases by Ralph B. Cloward, M.D.

Pathologic Anatomy and Biology by Paul Klemperer, M.D. (by special invitation).

Fatal Renal Failure Following Transfusion of Compatible Blood and Excessive Intravenous Administration of Fluids by Michele Gerundo, M.D.

Sudden Death in Male Filipinos—An Unexplained Syndrome by Alvin V. Majoska, M.D.

Clinical and Experimental Research in the Field of Cancer by Samuel C. Harvey, M.D. (by special invitation).

Diverticulitis of the Colon by Laurence M. Wiig, M.D.

Streptomycin in the Medical and Surgical Treatment of Tuberculosis by R. N. Perlstein, M.D. and Paul Gebauer, M.D.

MEETINGS

Council—Thursday afternoon, 4:00, Mabel Smyth Building.

House of Delegates—Thursday evening, 7:00, Mabel Smyth Building.

House of Delegates—Saturday luncheon, Pacific Club.

Special Address—Thursday, 8:00, Mabel Smyth Building
Public Relations—The Public Looks at the Doctor by Theodore R. Sills.

Other meetings held in conjunction with the annual meeting were:

Advisory Committee to Bureau of Maternal and Child Health, Thursday luncheon, Kamehameha Alumni Club House.

Advisory Committee to Bureau of Crippled Children, Thursday afternoon, Mabel Smyth Building.

Round Table Meetings, Saturday morning, Pacific Club:
Pathology—led by Paul Klemperer, M.D.
Surgery—led by Samuel C. Harvey, M.D.

SOCIAL PROGRAM

Tea—Friday afternoon, Waioli Tea Room.

Dinner-Dance—Saturday evening, Pacific Club.

Golf—Sunday morning, Waialae Golf Club; F. C. Spencer, M.D., in charge.

Tour of New Tripler Hospital—Sunday morning.

Picnic—Sunday noon, home of Drs. Robert and Marie Faus.

NOTES

Scientific papers presented will be published in the HAWAII MEDICAL JOURNAL.

The first exhibit of the Hawaii Physicians' Art Association was held in the Honolulu County Medical Library during this meeting.

Scientific exhibits relating to cancer and leprosy were displayed in the Stella Lowrey room of the Mabel Smyth Building.

Minutes of meetings and reports follow:

MINUTES OF MEETING
COUNCIL

Thursday, May 6, 1948, 4:00 p.m.

Mabel Smyth Auditorium

Present: Dr. Robert Faus presiding; Drs. Wallis (Kauai), Crawford (Hawaii), F. J. Pinkerton, Fred Lam, and Palma.

Minutes: The minutes of the meeting of March 17 were approved as circulated.

Nominations: The Nominating Committee report was read and discussed.

Preparedness: Dr. Faus said that an over-all preparedness plan has been prepared for the Territory. Each county has been asked to prepare for its own communities. The Territorial Association will participate and cooperate with the plans as they are being prepared.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Crawford, the Council adopted and approved the preparedness plan presented by Dr. Faus.

Dr. Faus stated that as long as he is on the staff of the National Guard, he will be the Medical Director of the preparedness plan for the Territory. He was officially appointed by General Makinney.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Wallis, it was recommended that Dr. Robert B. Faus be considered the organizer and director of the plans for all the islands for direction, consultation and advice.

Finances: The matter or reimbursement for Councillors' expenses in attending meetings was brought up.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Lam, it was voted that when a Council meeting is specifically called for public relations business, a bill for the expenses of the Councillor's travel to the meeting may be submitted to the Public Relations Committee.

The Public Relations Fund should not cover expenses of Councillors attending regular Council meetings. For such meetings it was suggested that the expenses be borne by the county societies.

Mrs. Bennett presented the following budget for the coming year:

BUDGET

Income:		
Dues—358 active members at $15.00	$5,370.00	
Journal		
Advertising	7,000.00	
Subscription and Sales	2,300.00	
Annual Meeting	300.00	
		$14,970.00
Expenses:		
Salaries		
Rent	720.00	
Postage	300.00	
Journal Expense	9,500.00	
Travel	150.00	
Taxes		
Supplies	400.00	
Library	100.00	
Miscellaneous	250.00	

The items for salaries and taxes were left open since these depended on what kind of a public relations program might be undertaken and how much staff would be necessary to carry it.

ACTION: On motion duly made and seconded, the budget was unanimously approved with the salaries and taxes items left open to be decided at a later meeting.

Dues: Mrs. Bennett reported that the JOURNAL had produced a better income than expected during the past year and that the financial outlook was brighter than it seemed a few weeks ago when an increase in dues was suggested. It was brought out that the Honolulu County Medical Society's position had changed in regard to its financial outlook since the payments from the hospitals for care of indigent patients had ceased. It will be necessary for the Honolulu County Medical Society to draw heavily upon its reserves during the coming year. If the Territorial dues were increased, it would be a heavy burden on the Honolulu County Medical Society treasury or upon its members who are already paying $60.00 a year dues.

ACTION: On motion of Dr. Crawford, seconded by Dr. Pinkerton, it was recommended that in view of the increased revenues of the Territorial Association, an increase in dues would not be necessary.

The treasurer's report based on the report of the auditors was read and approved.

ACTION: On motion of Dr. Lam, seconded by Dr. Pinkerton, a decision as to a special assessment was deferred.

Public Relations: Dr. Pinkerton presented the following resolution:

RESOLUTION

WHEREAS, the Hawaii Territorial Dental Association has levied an assessment against each of its members of $40.00 annually for 1948-1949, which assessment totals approximately $10,000.00 annually from 250 members, and

WHEREAS, the purpose of this assessment is to assist the medical profession to conduct a public relations program in the interests of preserving our American free enterprises, not only in the professions but in all businesses as well, and

WHEREAS, $8,640.00 of the first assessment has already been made available and is in our hands for the above specified purposes, and

WHEREAS, the formation of a joint committee of Physicians and Dentists is desirable and necessary jointly to expend these funds but no proper authority exists to form such a committee, THEREFORE BE IT

RESOLVED, that the House of Delegates of the Hawaii Territorial Medical Association authorize the committee on Public Relations of the Hawaii Territorial Medical Association to serve jointly with a similar committee of the Hawaii Territorial Dental Association to be known as the Medico-Dental Public Relations Committee and to function under the terms of the following agreement:

"that all monies collected by the Hawaii Territorial Dental Association by a special assessment of $40.00 against its members shall be paid into a special fund known as the Medico-Dental Public Relations Fund.

"that the unexpended balance of the monies collected from assessments against the members of the Hawaii Territorial Medical Association shall be paid into the above Medico-Dental Public Relations Fund,

"that the administration of the funds and expenditures therefrom shall be jointly agreed upon by the above committees for payment of such activities as rightly come under a program of public relations, without respect to the relationship or ratios of such expenditures to the respective interests of either profession, but strictly on the basis of the principle of preserving and improving the present high standards of medicine and dentistry as a free enterprise.

"that withdrawals from the joint fund shall be made on the signature of the executive secretary after approval by the chairman or vice-chairman of the joint committee.

"that the Central Office or Headquarters office shall be located in the office of the Hawaii Territorial Medical Association.

"that a financial report shall be rendered quarterly to the President of each Association indicating the activities performed, the costs, and the recommendations of the Association as to future assessments and program activities.

"that it is mutually agreed that Mrs. Edith Bennett shall be the executive secretary of this joint committee, effective subject to ratification by the Hawaii Territorial Medical Association, and

"be it further resolved that authorization be given to your Public Relations Committee to enter into comparable relationships with other organizations, should the need arise and should such relationship appear to be in furtherance of the purposes above defined."

ACTION: On motion of Dr. Lam, seconded by Dr. Wallis, the Council recommended to the House of Delegates that a Public Relations Committee such as Dr. Pinkerton proposed be formed for the purposes outlined in the Resolution.

Correspondence: A letter was read from Mr. Chamberlin of the Department of Public Instruction requesting the approval of the Hawaii Territorial Medical Association for the use of Dr. Lynn's services as a consultant for the Department of Public Instruction in cases of teachers who might need psychiatric examinations to determine their fitness to carry on their work.

ACTION: On motion of Dr. Crawford, seconded by Dr. Pinkerton, the Council approved the request for the use of Dr. Lynn's services as consultant for the D.P.I. without fee as outlined in Mr. Chamberlin's letter of May 3, 1948.

A letter was read from General Makinney to Dr. Faus. This was an appeal to the Medical Association for assistance in securing medical officers to fill vacancies now existing in units of the Hawaii National Guard.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Crawford, it was agreed that the information contained in General Makinney's letter should be circularized to the profession and that General Makinney be advised that as an association, we believe his request is necessary and are therefore encouraging compliance with that request.

A letter from Dr. H. M. Patterson was presented, proposing an amendment to the by-laws of the Association to provide for a distinguished service award on the basis of meritorious services in the art and science of medicine. Dr. Patterson's letter had previously been copied and circulated to the members of the Council in order that they might have an adequate opportunity to consider the matter.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Crawford, action on Dr. Patterson's proposal was deferred to a future meeting of the Council for further study.

Dr. Judd: The fact that Dr. Judd had died since the last meeting of the Territorial Association was brought up.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Lam, the Council agreed to ask Dr. Strode to prepare a resolution concerning Dr. Judd.

There being no further business to come before the meeting, it was adjourned.

Respectfully submitted,

(Mrs.) Edith C. Bennett
Executive Secretary

MINUTES OF MEETING HOUSE OF DELEGATES

Thursday, May 6, 1948, 7:00 p.m.
Mabel Smyth Auditorium

Reports: The following reports were read, accepted and placed on file:

Component Societies
1. Hawaii County—Dr. Donald Depp
2. Honolulu County—Dr. Edwin Chung-Hoon
3. Kauai County—
4. Maui County—Dr. W. B. Patterson

Officers
1. Report of the Council—Mrs. Edith C. Bennett
2. Report of the Secretary—Mrs. Edith C. Bennett
3. Report of the Treasurer—Dr. Fred Lam

Committee Reports
1. Cancer Committee—Dr. Grover A. Batten
2. Health Education Committee—Dr. Marie Faus
3. Hawaii Medical Journal—Mrs. Edith C. Bennett
4. Psychiatry and Neurology—Dr. Ralph B. Cloward
5. Board of Management, Mabel Smyth Building—Dr. Samuel Yee
6. Scientific Works Committee—Dr. R. N. Perlstein
7. War Recognition Committee—Dr. Steele Stewart
8. Nominating Committee—Dr. Grover A. Batten
9. Polio Committee—Dr. R. Nelson Hatt
10. Medical Economics and Public Relations—Dr. F. J. Pinkerton
11. Fee Schedule Committee—Dr. Steele Stewart

The Fee Schedule report was accepted without action on the recommendations. The following questions were asked regarding the new fee schedule: Is there any sliding scale for individuals who cannot afford to pay the fees that are in the schedule? If a patient cannot afford the fee, must he be referred to the City and County? Will the fee schedule be submitted to the county societies before adoption? How does the office fee compare with the average daily wages of a worker? Are medical cases included? Please give us a few examples.

Dr. Stewart replied as follows: The charges are set up on the basis of a low income group—$2,500 for a single man and $3,500 for a family. Any doctor who routinely charges less than the basic fee schedule endangers the entire fee schedule. The time taken for operations is the mean time. The action of the Territorial Association would be binding on the county societies. I suggest that the county Fee schedule Committee be kept active to determine the local fee schedule for office calls.

The meeting adjourned to meet again at 2:00 p.m. Friday.

Respectfully submitted,
(Mrs.) Edith C. Bennett
Executive Secretary

SUMMARY OF ACTIVITIES OF THE HAWAII COUNTY MEDICAL SOCIETY

Regular monthly meetings as well as three special meetings were held throughout the year.

Scientific papers were given by Drs. C. C. Sturgis, F. B. Schultz, W. B. Quisenberry, R. O. Brown and J. G. Lynn. The Society also had the opportunity of hearing Dr. Sterling Bunnell when he was a guest of the Territorial Plantation Physicians Association at their annual meeting.

Speakers on Medical Economics and related subjects included Marjorie Shearon, Dr. F. J. Pinkerton, Mr. Stegen, Dr. R. B. Faus, Dr. J. Palma and Mr. Flath. Mrs. J. Christians spoke on the working of the Department of Public Welfare.

A tumor clinic was started in December to be included in each meeting. These clinics proved to be valuable and interesting.

A motion was passed unanimously that this Society go on record as opposing any form of biological warfare.

A portrait of Dr. Fred Irwin donated by the Hawaii Medical Service Association was presented in July to be hung in the Fred Irwin Library at the Hilo Memorial Hospital.

New members included Drs. S. Yamanoha, T. Strathairn, E. B. Cunningham, F. Wong and V. Jim. Dr. Leslie's resignation was accepted in June 1947 but a reapplication by him was accepted in March 1948.

Drs. T. Yoshina, H. Patterson, and R. West transferred to Honolulu.

Dr. D. Depp transferred from Kauai to Hilo and Dr. Leo Bernstein transferred to regular membership from service status.

A Mental Hygiene Fund was set up to take donations from grateful patients. The money derived from this source will be used in increasing facilities to care for the mentally sick.

The Society has gone on record as favoring the policy of the American Association of Physicians and Surgeons. Also that when 75 per cent of the members of this Society signify their willingness to join this Society will petition for a charter.

The annual meeting was held at Fernhaven when Dr. S. Mizuire, retiring president, gave a very special Chinese cooked meal to the members. He was given a rising vote of thanks for his work as president during the previous year.

Harold M. Sexton, M.D.
Secretary

SUMMARY OF ACTIVITIES OF THE HONOLULU COUNTY MEDICAL SOCIETY

The attendance of the meeting of the Honolulu County Medical Society was an improvement over the previous year. Two noteworthy achievements were: (1) the complete revision of the Constitution and By-laws of the Society, and (2) a program of public relations and medical economics for the Honolulu County Medical Society, guided by Dr. Lyle G. Phillips.

Of concern to the Society is the future financial set up. Payments by the City and County to the Society for its care of charity patients have ceased so that it will be necessary to find ways and means of increasing the treasury of the Society for its functions. In about three years, the present surplus will have been depleted, seriously, if not exhausted.

The membership is as follows:

Active members	274
Non-resident members	8
Reitred members	5
Honorary members	17

Samuel L. Yee, M.D.
Secretary

SUMMARY OF ACTIVITIES OF THE KAUAI COUNTY MEDICAL SOCIETY

Officers for the year 1947-1948 were:

President—Dr. Donald Depp
Vice-President—Dr. William Toney
Secretary-Treasurer—Dr. Patrick M. Cockett
Delegate—Dr. Webster Boyden
Alternate Delegate—Dr. Marvin Brennecke
Board of Censors—Dr. Sam R. Wallis, to serve 2 years; Dr. Burt O. Wade, to serve 3 years; Dr. D. R. Chisholm, to complete final year

Officers for the year 1948-1949 are:

President—Dr. Patrick M. Cockett
Vice-President—Dr. Eichi Masunaga
Secretary-Treasurer—Dr. William Goodhue
Delegate—Dr. Marvin Brennecke
Alternate Delegate—Dr. Webster Boyden
Board of Censors—Dr. Sam R. Wallis, to serve 1 year; Dr. Burt O. Wade, to serve 2 years; Dr. Jay M. Kuhns, to serve 3 years

The Kauai County Medical Society holds its monthly meetings at the G. N. Wilcox Memorial Hospital, Lihue, Kauai, T. H., on the second Wednesday of each month at 7:30 p. m.

Personnel:

1. The Society lost three members during the year 1947-1948: Dr. Donald Depp transferring from Koloa Plantation Hospital, Koloa, Kauai, T. H., to Olaa Plantation Company Hospital, Olaa, Hawaii; Dr. William Toney transferring from Kilauea Plantation Hospital to the Pioneer Mill Company, Ltd. Hospital, Lahaina, Maui, where he will be assistant to Dr. William Dunn. Dr. Wallace Kawaoka also transferred to the Honolulu County Medical Society.

2. Dr. Ernest Bickell, interne from Queen's Hospital, in Honolulu, T. H., replaces Dr. William Toney; but since he does not have a Territorial medical license, he is not as yet a member of this society.

3. Dr. Hong Chong Chang, who is an active member, is now specializing in radiology in Pennsylvania. He has continued to pay his dues but is exempted from the payment of the special medical economics assessment for 1946 and 1947.

4. Dr. William Goodhue, assistant physician at Mahelona Hospital, Kapaa, Kauai, T. H., was admitted into the Kauai County Medical Society at our last meeting on March 10, 1948.

5. Dr. W. A. Harl, although still a member, on inactive status, is now practicing in Honolulu—location unknown.

6. There are 15 members in this society—eleven who are in active practice on Kauai, one who is an associate member, two who are honorary members and one who is in Pennsylvania specializing in radiology. They are:

ACTIVE MEMBERS

Dr. Boyden, Webster	Dr. Goodhue, William
Dr. Brennecke, Marvin	Dr. Kuhns, Jay M.
Dr. Chang, Hon Chong	Dr. Liu, David
Dr. Chisholm, Donald	Dr. Masunaga, Eichi
Dr. Cockett, Patrick M.	Dr. Wade, Burt O.
Dr. Fujii, Kenneth	Dr. Wallis, Sam R.

HONORARY MEMBERS

Dr. Patterson, Lawrence	Dr. Waterhouse, A. H.

ASSOCIATE MEMBER

Dr. Ecklund, A. M.

NON-AFFILIATED PHYSICIANS

Dr. Bickell, Ernest	Dr. Horton, R. M.

Public Welfare:

1. Since there is no pathological service on Kauai, all laboratory procedures, not done in the Waimea and G. N. Wilcox Memorial Hospitals were performed by Mrs. Kay Y. Hardy, laboratory technician, for the Territorial Board of Health in the laboratory at Lihue, Kauai, T. H., up until the end of the year 1947. Since January 1, 1948, the Board of Health laboratory ceased operating due to the non-availability of a laboratory technician. The Mahelona Hospital laboratory has performed a great share of the laboratory procedures since January 1, 1948. The services of a pathologist were to be made available by application but applications have not been filled to date; although Dr. Michele Gerundo, pathologist for the Hawaii County Medical Society and the Hilo Memorial Hospital, visited Kauai in order to look over the available facilities at the Waimea and G. N. Wilcox Memorial Hospitals.

2. Dr. John G. Lynn, psychiatrist for the Board of Health Bureau of Mental Hygiene, has organized the pychiatric service on the island of Kauai so that he is able to make one to two calls per month at which time he is consulted and is able to treat early cases of mental disease by electrical shock theraphy. Through his efforts, a mental hygiene fund has been started from revenues received from donations as well as from fees he receives in treatment of private or plantation patients. This fund is administered through the Kauai County Medical Society secretary-treasurer and is to be used by Dr. Lynn for the purchase of equipment or supplies for the benefit of this service.

3. A home for the aged and infirm is a necessity for the island of Kauai. The American Legion, through the County of Kauai, had plans for the conversion of the Kaiakea Annex of the Mahelona Hospital into such a project; but due to the high cost of materials and labor, this project has not yet been realized.

4. The Medical Economics Committee of the Hawaii Territorial Medical Association business and policies were followed with much interest and enthusiasm by the members of this Society who contributed 100 per cent for the years 1946 and 1947. Dr. Joseph Palma, president-elect of the Hawaii Territorial Medical Association, and Mrs. Edith Bennett, executive secretary of the Hawaii Territorial Medical Association, both visited our society to discuss the policies of the Medical Economics Committee. They stated that all policies would be administered through their office and that the Smith-Mansfield and Cummins Public Relations Agency was no longer connected with their committee since January, 1948.

5. Dr. Webster Boyden called the attention of the members to the establishment of the Kauai Eye Clinic in Lihue, Kauai, T. H., by six doctors specializing in eye, ear, nose and throat from the Honolulu County Medical Society. This Eye Clinic disbanded immediately after opening.

6: The government physicians of the Kauai County Medical Society got together recently to resign their positions pending the reorganization of their department for indigent care. They proposed the following changes:

a. All indigents to have choice of physicians per fee for service.
b. Registrar's position to be performed by clerk at fixed salary.

7. Blood Bank:

There is still no blood bank on the island of Kauai at the present time. This county's society did not favor the facilities offered by the Honolulu County blood bank because the present system of professional and voluntary blood donors available to both the Waimea and G. N. Wilcox Memorial Hospitals was considered satisfactory.

8. Emergency Medical Program:

Dr. Robert Faus, President of the Hawaii Territorial Medical Association, visited the county medical society

and recommended that we organize the members in case of another emergency like December 7, 1941. The members approved of this vital matter. Talks to schools and to Parent-Teachers organizations concerning first aid instructions will be organized by the membership in the coming fiscal year.

Legislative Activities: The Policy and Legislative Committees recommended that the secretary-treasurer contact each Kauai senator and representative during the last 1947 Legislative Session in order to notify them that the Kauai County Medical Society was against bills that were supposed to socialize the practice of medicine in the Territory of Hawaii. Mr. Clem Gomes, Republican Senator from Kauai, and President of the Senate, assured us, in writing, that no legislation for socialized medicine would pass the Senate. Mr. J. B. Fernandez, Democratic Senator from Kauai, assured us that no bills for socialized medicine would be sanctioned by him. We did not hear from the other members of the Legislature.

Scientific Measures:

1. The Hawaii Medical Society Convention took place at Lihue, Kauai, T. H., in May, 1947, and the members of the Kauai County Medical Society were very fortunate to listen to so many prominent medical men from the other islands of the Territory as well as a talk on Coronary Disease of the Heart by Dr. Cyril Sturgis of Michigan.
2. Dr. Donald Chisholm participated in the program by discussing a paper by Dr. Joseph Strode. There were no papers presented by any of our society members.
3. During the past fiscal year, we were not able to hear any of the medical surgical specialists who stopped off in Honolulu, T. H. But Dr. John G. Lynn, Director of Mental Hygiene, of the Board of Health, Honolulu, T. H., did present a kodachrome movie of a case study of one of his psychosis patients with a deviation personality pattern.

PATRICK M. COCKETT, M.D.
Secretary

SUMMARY OF ACTIVITIES OF THE MAUI COUNTY MEDICAL SOCIETY

Number of stated meetings	6
Number of special meetings	1
Number of Board of Governors meetings	1
Number of Transfers—Out	2
Number of Transfers—In	1
Awaiting Membership	3

There are three doctors awaiting acceptance by the society. Two of these are by transfer and one awaiting completion of his one-year residence.

This year the Society inaugurated a system of alternate clinical and business meetings. Clinical meetings were held at Kula Sanatorium and Malulani and Paia Hospitals. Cases were presented and discussed by the respective staffs. At alternate meetings the Society heard either guest specialist speakers or officers of the Territorial Association. Both types of meeting included short business meetings.

The Society is in good financial condition with no outstanding debts.

W. T. KANDA, M.D.
Secretary

REPORT OF THE COUNCIL

The Council held meetings in July, October, January, March and May of the year just completed. At each meeting the Public Relations and Medical Economics Committee reviewed its activities. It was found that the three special assessments for public relations passed by the House of Delegates at the annual meeting last year were not strictly in accordance with the by-laws of the Hawaii Territorial Medical Association. Upon consultation with a lawyer, we were informed that any assessment over the sum of $25.00 per member in one year must be submitted to the members for referendum. Accordingly, a written referendum was submitted on January 9, 1948 to all members of the Territorial Medical Association. Dr. Robert B. Faus, the President, declared the referendum closed on February 9, 1948.

The results were as follows:

Special Assessments	*For*	*Against*	*Blank*
1946	188	50	12
1947	171	70	9
1948	107	137	6

Since a majority of the members had voted, this referendum was declared effective so that the 1946 and 1947 assessments were due from the county societies to the Territorial Association and the 1948 assessment was voted down.

The Council accepted the resignation of Smith-Mansfield & Cummins as public relations advisors for the Association to take effect January 31, 1948. A new program was adopted for the period from January 1 to May 1 whereby the public relations program was handled through the office of the Medical Association in cooperation with the Public Relations Committee.

The Council directed the Fee Schedule Committee to try to make its fee schedules as uniform as possible. Much work has been done by that committee to accomplish this. The Council also recommended to the Fee Schedule Committee that fees for physical examinations for insurance be increased from $5.00 to $10.00.

The Council endorsed the American Association of Blood Banks, which was organized in November, 1947.

Many matters of Territorial Association business were brought before the Council and it was necessary to meet more frequently than had been done in frequent years. It woud seem advisable to continue to hold Council meetings at least every three months as provided in the by-laws.

MRS. EDITH C. BENNETT
Executive Secretary

REPORT OF THE SECRETARY

The total membership of the Association in all classes is 393, of which 354 (23 more than last year) are paid regular members. By counties this membership is made up as follows:

	Regular Members	Members in Service	Non-Resident Members	Retired Members	Honorary Members	Total, All Classes
Hawaii	44	0	0	0	2	46
Honolulu	272	2	8	5	17	304
Kauai	12	0	0	0	2	14
Maui	26	0	0	0	3	29
Total	354	2	8	5	24	393

The total number of physicians licensed to practice medicine in the Territory of Hawaii, as of April 1, 1948 is 478. Of this number only 401 are now residing in the Territory. Of these 401 doctors, 363 or approximately 91 per cent belong to the Hawaii Territorial Medical Association.

MRS. EDITH C. BENNETT
Executive Secretary

REPORT OF THE TREASURER

Our books have been audited by Hiu, Dean and Paris and our accounts are all in order. We now have a balance in the treasury of $19,712.00 of which $13,491.90 is the balance remaining in the medical economics fund raised by special assessments. Although our balance sheet for the past fiscal year shows that we spent $1,135.64 more than our income for the year, the overexpenditure was in the medical economics fund and was drawn from the surplus of the 1946 assessment. Aside from medical economics, the Territorial Association actually showed a net profit for the year of $918.54. Even the HAWAII MEDICAL JOURNAL operated at a profit of $973.48 for the year.

Therefore, it seems at this point that the financial outlook of the Territorial Medical Association is considerably brighter than it was in March when your Council proposed that the County Societies consider the question of increasing membership dues in the Territorial Association. Since that time we have also had a considerable increase in JOURNAL subscriptions. Consequently, it now appears probable that by careful planning we shall manage to get along on our income for the year 1948-1949.

FRED K. LAM, M.D.
Treasurer

REPORT OF THE CANCER COMMITTEE

The Cancer Committee of the Territorial Medical Association respectfully submits the following report of its activities of the year 1947-1948:

The efforts of your committee have been directed chiefly along two lines, namely: the promotion and establishment of a cancer clinic and the formation of a cancer society. We are happy to be able to report that both objectives have been attained. The Queen's Hospital Cancer Clinic, which was established about 1928 and discontinued during the war, has been reactivated and its scope broadened, enabling it to be of greater value to the doctors of the Territory than formerly. Its policy will be to work with and through private physicians and in no manner interfere with the physician-patient relationship. The magnitude of its work will depend to a great extent on the funds available for its use. The St. Francis Hospital has a cancer diagnostic clinic in service at present. Its activities are limited to a review of the patients in that hospital, offering a consultation service for same.

Through the efforts of your committee, together with other interested lay members, the Hawaii Cancer Society has been formed. The Board of Directors of this society is composed of half doctors and half laymen. The Cancer Committee members of the Territorial Medical Association are automatically members of the Board of Directors of the Hawaii Cancer Society. It is incorporated under the laws of the Territory of Hawaii. It is hoped that it will serve the purpose of bringing together all groups and agencies in the Territory interested in cancer control and serve as a clearing house for the same.

The purpose of this organization as stated in its by-laws is to analyze and disseminate information to the members of the medical profession and lay people concerning the symptoms, diagnosis, treatment and prevention of cancer, treatment of those suspected of having cancer, and promotion of facilities for the diagnosis and treatment of cancer patients and suspected cancer patients for research into the cause and cure of cancer and to obtain funds to carry out these purposes.

They have permanent headquarters in a cottage at 1136 Punchbowl Street. The entire month of May was devoted to an educational and fund-raising campaign to carry out the purposes expressed in these by-laws. They have purchased Cancer Bulletins, originally edited and published by the Illinois Cancer Society, for distribution to all the members of the Hawaii Territorial Medical Association.

GROVER A. BATTEN, M.D.
Chairman

REPORT OF THE HEALTH EDUCATION COMMITTEE

The Health Education Committee extended its activities this year. Our programs were heard at the Mabel Smyth Auditorium by 600 women. We also arranged for two series of radio broadcasts free over station KHON. Some letters of appreciation for these broadcasts were received . The Kauai radio station put on a series of 13 broadcasts without charge. These were from transcriptions sent to us by the A.M.A. The Public Relations Committee thereafter took over this activity. Our committee offered education lectures by local doctors, such as had been requested by various organizations.

Seven public lectures addressed to beauty operators were given in the Mabel Smyth Auditorium. In these we strove to teach the operators when to call the doctor. Even though the meetings were held at 8:30 in the morning the average attendance was about 100.

Newspaper notices in the name of the Territorial Medical Association announcing the name of the doctor to lecture, the time, place and the subject were published in the local newspaper. These were advertisements for which we paid. So far no one has registered a complaint, and many have complimented us on this plan.

In January the American Association of University Women requested health instruction from us. We gave them a lecture a month, under their sponsorship. These three lectures, two in the morning and one at an evening meeting, were much appreciated by the university women. They were given in the Mabel Smyth Auditorium, and were open to the general public.

Newspaper notices of these events, with the doctor's name and his subject, were published in the society columns of the newspapers. No paid advertisements were placed for this series. The audiences averaged 30 persons.

Notices of all lectures, properly worded, were announced on the KGMB "Information" program for several days previous to the meetings.

The lectures to the beauty operators were:

Common Skin Diseases—By Dr. Harry L. Arnold, Jr.
Skin Conditions—By Dr. Harold Johnson
Allergy—By Dr. Tell Nelson
Heart Symptoms: Are They Serious?—By Dr. A. S. Hartwell
Plastic Surgery and Anatomy of the Face—By Dr. Wayne Wong
Pain—By Dr. A. V. Majoska

Lectures given to the AAUW health section were:

Medical Safeguards in a Reducing Program—By Dr. Marie Faus
Physical Fitness—By Dr. Paul Withington
Skin Diseases—By Dr. Harold Johnson

The Committee appreciates the time and effort given by these doctors.

In the opinion of the committee this type of publicity is desirable and though we cannot measure it, we are sure that a great deal of helpful information has been given which is bound to be of benefit to both the public and the profession.

MARIE FAUS, M.D.
Chairman

REPORT OF THE HAWAII MEDICAL JOURNAL

The HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN have continued to thrive and grow throughout the year. Again this year the JOURNAL has increased the number of pages by about 20 per cent over last year.

The HAWAII MEDICAL JOURNAL has made valuable contributions to the Medical Library in books and journals. The book review department is now well established and we have received 59 medical books for review during the year. As most of you know all too well, medical books are expensive. By having these new books reviewed by our doctors and nurses, we have received $350.14 worth of books, which were presented to the Medical Library without cost. We also received 102 journals in exchange for ours. These are also presented to the Library without cost and represent a subscription value of about $275 per year.

Another new department established this year is the *Reminiscences of December Seventh.* These reports of experiences of our own doctors have been compiled by Dr. Steele Stewart and will undoubtedly form a valuable record of the contribution of the medical profession.

You have probably noticed the new face on the JOURNAL. We believe that the table of contents printed on the front cover gives the reader at a glance a summary of what the issue includes and provides a much handier reference than the former method of locating the table of contents among the advertisements.

The Nurses' Association find the joint publication of their *Bulletin* with our JOURNAL of sufficient value so that they have already notified us of their intention to cooperate with us in the JOURNAL throughout 1949.

During the past year the JOURNAL also became the official publication of the Hospital Association of Hawaii, in addition to the Nurses' Association and the Medical Association. The circulation has increased to 1328 copies.

Of course the news you will really be glad to hear is that for the first time in history the HAWAII MEDICAL JOURNAL showed a profit. The income from advertising amounted to $7,390.60, which was $2,100 more than we had ever received before. From subscriptions we realized $2,261.25. The total income was $9,651.85 and the expenses amounted to $8,678.33, leaving a net profit on the JOURNAL for the year of $973.48.

Since our editor, Dr. Harry Arnold, Jr., left me to write this report in his absence, I should like to take this opportunity to call to your attention how fortunate this Medical Association is to have a doctor with such marked ability in the editorial and literary field who is able and happy to give freely of his time and efforts to produce a medical journal which compares so favorably with journals in the various states.

MRS. EDITH C. BENNETT
Managing Editor

REPORT OF THE COMMITTEE ON PSYCHIATRY AND NEUROLOGY

The Committee on Psychiatry and Neurology held no meetings and conducted no official business during the year.

RALPH B. CLOWARD, M. D.
Chairman

REPORT OF THE BOARD OF MANAGEMENT, MABEL SMYTH BUILDING

The Board of Management of the Mabel Smyth Building held its meetings on the average of once a month. One of the issues settled was the clarification of the use and purposes of the building. The following letter was sent to the Honolulu County Medical Society:

"There has been some misunderstanding among the members of the medical and nursing organization about a recent ruling of the Board of Management of the Mabel L. Smyth Memorial Building about the use of the building.

"At the last meeting of the Board, it was decided, for your information, to quote from our agreement with the Queen's Hospital, regarding the responsibilities of the Board:

" 'The entire building . . . shall serve as a medical center for Registered Nurses, Doctors of Medicine, and for such community activities as the Board of Management may approve. Any use for these general purposes shall be proper.'

"Two doctors, Dr. Thomas Richert and Dr. Samuel Yee, and two nurses, Mrs. Helen Gage and Miss Agnes Peterson, are your representatives on the Board and they will be glad at any time to bring your wishes to the Board."

Matters pertaining to the budget, insurance of property, and general running expenses of the building were taken up and it was felt that the building was in sound financial standing. One disturbing topic was that of expansion for the Library. It was felt that much thought should be given to this matter since the present plan will be inadequate in the near future.

SAMUEL L. YEE, M. D.

REPORT OF THE SCIENTIFIC WORKS COMMITTEE

The Scientific Works Committee first met in the middle of November, 1947, and has been working on the program for this annual meeting since that time. Letters were sent to each of the county societies asking for papers to be presented at the Territorial meeting. Unfortunately, no papers have been submitted this year by doctors from the outside islands.

We were, however, particularly fortunate this year in having with us for annual meeting such outstanding authorities as Dr. Paul Klemperer in pathology, Dr. Samuel Harvey in surgery, and Dr. Lloyd Aycock in poliomyelitis, as well as Mr. Theodore R. Sills in the field of public relations. In addition, we believe that the high quality of papers presented by our own members will provide a program of unusual interest.

R. N. PERLSTEIN, M. D.
Chairman

REPORT OF THE WAR RECOGNITION COMMITTEE

During the past year we have continued to gather reminiscences of December 7, 1941, and have begun the publication of the reports.

We propose to continue this work as soon as we get our insurance matters cleared up and hope that before another year goes by, the job will have been completed, although publication may continue for a year or two more.

STEELE F. STEWART, M. D.
Chairman

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committe of the Hawaii Territorial Medical Association submits the following nominations for the year 1948-1949:

President-elect.....H. E. Crawford,M.D.
Councillors (from Oahu, two to be elected):.....
John L. Bell, M.D.; R. L. Hill, M.D.; F. J. Pinkerton, M.D.
Delegate to American Medical Association....F. J. Pinkerton, M.D.
Alternate.....Alfred S. Hartwell, M.D.

GROVER A. BATTEN, M.D.
Chairman

REPORT OF THE POLIO COMMITTEE

As chairman of the Polio Committee, I have no formal report to offer. One meeting was held during the current year at which time the matter of fee schedules was discussed without arriving at any definite conclusions.

R. NELSON HATT, M.D.
Chairman

MINUTES OF MEETING HOUSE OF DELEGATES

Friday, May 7, 1948 at 2 p.m.
Mabel Smyth Auditorium

Cancer Morbidity Study: A request for approval of a cancer morbidity study to be conducted by the Department of Health had previously been submitted to each of the county societies for consideration.

ACTION: On motion of Dr. H. M. Patterson, the proposed cancer study by the Department of Health was disapproved by the House of Delegates in its present form with the recommendation that the matter be referred to the Hawaii Cancer Society.

Dues: The Council recommended that an increase in dues is not necessary at this time.

ACTION: On motion of Dr. Robert Johnston, the delegates voted that the dues of the Hawaii Territorial Medical Association should not be increased this year.

Crippled Children: A letter from the Hawaii Chapter of the National Society for Crippled Children and Adults, Inc., requested that the Medical Association at this and each subsequent annual meeting appoint a representative from the Association to serve for one year as a member of the Medical Advisory Board of the Hawaii Chapter.

ACTION: On motion of Dr. French, it was agreed that the President of the Association should annually appoint a representative to the Medical Advisory Board of the Hawaii Chapter of the National Society for Crippled Children and Adults, Inc.

Next Meeting:

ACTION: On motion of Dr. Johnston, seconded by Dr. French, it was voted to hold the next annual meeting of the Hawaii Territorial Medical Association in Honolulu, May 5, 6, 7 and 8, 1949 and to set the registration fee at $10.00.

Reports: Dr. Hatt's report on the Medical Advisory Board to the Bureau of Crippled Children was read. Dr. Wiig spoke of the great need for more funds for the care of crippled indigent children. Funds are needed for dental care, speech training and secondary surgical procedures.

ACTION: A motion made by Dr. French, seconded by Dr. Depp, and amended by Dr. H. M. Patterson, was passed to accept Dr. Hatt's report as read and to appoint to the National Society for Crippled Children one of the same doctors who was serving on the Medical Advisory Board to the Bureau of Crippled Children.

Dr. Bowles' report of the Medical Advisory Board to the Bureau of Maternal and Child Health was read. There was much discussion concerning a means test for maternal and child health conferences.

ACTION: On motion of Dr. William Patterson, seconded by Dr. Johnston, the report was accepted as read by a vote of 12 to 1.

The meeting was adjourned to meet again at 10:30 Saturday morning at the Pacific Club.

Respectfully submitted,

MRS. EDITH C. BENNETT
Executive Secretary.

REPORT OF THE MEDICAL ADVISORY COMMITTEE, BUREAU OF CRIPPLED CHILDREN

1. The Crippled Children Advisory Committee appreciates the work of the Bureau of Crippled Children in initiating the new programs for rheumatic fever and cerebral palsy during the past year. In view of the extreme lack of funds appropriated by the Territory for the crippled children program, it is recommended that we as physicians take an active part in explaining the medical needs of crippled children to the Territorial Legislature with the hope that their better understanding will lead to an increased appropriation.

2. There was general agreement of the committee that in the development in the community of any volunteer or lay group programs for crippled children that medical advisory functions should stem from the Bureau of Crippled Children of the Department of Health and its advisory committee as appointed by the Territorial Medical Association, in order that there will be coordination of activities and lack of duplication of services.

3. There was also agreement in line with the third recommendation of the committee for last year, that the urgent need for "convalescent and long term care" for crippled and other children be brought before the public more forcefully.

R. NELSON HATT, M. D.
Chairman.

REPORT OF THE MEDICAL ADVISORY COMMITTEE, BUREAU OF MATERNAL & CHILD HEALTH

1. The Bureau of Maternal and Child Health requested suggestions from the advisory committee as to ways of reducing the attendance at child health conferences. It was recommended by the committee that admission and attendance at maternal and child health conferences be limited by a means test. It was agreed that this screening would be made on an individual basis with consideration of all pertinent factors by the physician and nurse in the individual conferences.

2. There was general agreement by the committee that Rh determinations should be available in all maternal health conferences.

3. It was recommended that further study and analysis of maternal and neonatal mortality be continued and accelerated.

H. E. BOWLES, M. D.
Chairman.

MINUTES OF MEETING
HOUSE OF DELEGATES
Saturday, May 8, 1948 at 10:30 a.m.
Pacific Club—Luncheon Meeting

Present: Dr. R. B. Faus presiding; Drs. Gotshalk, Depp, Chun, Johnston, Murray, Wall, French, Hata, Brennecke, McArthur, William Patterson, Seymour, H. M. Patterson, H. R. Benson, Homer Izumi, Arthur, Chung-Hoon, Laurence Wiig; also Drs. Strode, Sexton, Palma, Dunn, Devereux, Stewart, Wilbar, F. J. Pinkerton and Mr. Theodore Sills.

Government Physicians: Letters from numerous doctors and Health Department personnel concerning the work and fees of the government physician was presented. The action of the Council on March 17 was also read. Dr. Patterson reported that the Maui government physicians would not resign. Although this system was not perfect, they thought it should be continued and improved. Dr. Seymour reported that the present system seemed to be satisfactory but there should be some adjustment of fees. Dr. Faus stated that the duties of government physicians had been revised recently. He called for objections to these duties as prescribed. No objections were offered. Dr. Faus also spoke about well baby clinics and their abuse by patients who are not indigents.

ACTION: Dr. Patterson moved, seconded by Dr. Seymour, that government physicians be paid on a fair and equitable flat salary basis in their districts. Dr. Johnston amended the motion to add that physicians should be reimbursed for the amount of medication they disburse for indigent patients. The amendment was voted on and passed. The motion in its original form was carried with one opposing vote.

Public Relations: Dr. Pinkerton said that the Public Relations Committee report had been accepted and filed. He presented the following resolution:

RESOLUTION

WHEREAS, the Hawaii Territorial Medical Association has had the experience with a Public Relations program for the past year, and

WHEREAS, from November 1, 1947, to May 1, 1948, our program and efforts were successful in preventing an ill-advised program of Government medicine, and

WHEREAS, the major program was carried out by the voluntary efforts of a small committee on Public Relations and Economics to the best of its ability, and

WHEREAS, such a project is a highly specialized operation, calling for the advice and skill of those specially trained in such programs, and

WHEREAS, the coming year forebodes a critical emergency in the free and unfettered practice of medicine, and

WHEREAS, it is imperative that the Hawaii Territorial Medical Association must use every means within its power to combat and prevent the encroachment of alien ideologies and practices into the care of the sick, and

WHEREAS, to continue our past program in an augmented form and manner we must meet these needs by a substantial budget of money to be obtained from the membership,

NOW THEREFORE BE IT RESOLVED, that the Council and House of Delegates of the Hawaii Territorial Medical Association acknowledge the above to be true and agree that the program on Public Relations must be continued and carried on in such manner as the situation demands, and

BE IT FURTHER RESOLVED, that a special assessment of $60.00 be levied against each member of the Hawaii Territorial Medical Association to provide payment for the necessary augmented program to be paid on or before September 1, 1948.

ACTION: On motion of Dr. H. M. Patterson, seconded by Dr. Hata, the House of Delegates unanimously gave the Public Relations Committee a complete vote of confidence for their work up to the present.

Dr. Arthur suggested that a referendum in the amount of $60.00 per member would be defeated. Dr. Gotshalk thought the $60.00 assessment would not pass and did not want the County Societies broken up. He favored the $26.00 assessment plus a voluntary contribution. Dr. Hata asked about the person who will direct the program. Dr. Depp said that the majority opinion on Hawaii is that an assessment would be approved. He believes that all except about two members would pay $60.00. Dr. William Patterson and Dr. Brennecke said that Maui and Kauai would support the resolution. Dr. Strode said it should be on the basis of the doctor's income.

ACTION: The Resolution quoted above was passed with the exception of the last paragraph.

Mr. Sills said, "You ned a good, skilled man. I have met with most of the top public relations men in the Islands. In their opinion there is not a sufficiently capable person on the Island. You will probably need some good man from the mainland. Mr. Ed Stegen does not stand 100 per cent behind the National Physicians' Committee. If he did, I would certainly recommend that you should not employ him. I believe you should investigate the field well before you employ Stegen or any other man."

ACTION: On motion of Dr. McArthur, seconded by Dr. Murray, the last paragraph was adopted by changing the wording to read as follows: Resolved that a special pro rata assessment of $23,000 be levied against the component societies of the Hawaii Territorial Medical Association to provide payment for the necessary augmented program to be paid on or before September 1, 1948.

It was agreed that the House of Delegates would recommend to the County Societies that they levy an assessment of $40 against every member and an additional $40 against all those who had been in practice at least five years and were not employed on a full-time institutional salary.

ACTION: On motion of Dr. McArthur, seconded by Dr. Seymour, a vote of thanks and appreciation was extended to Mr. Sills for his visit and efforts in our behalf.

Dr. Pinkerton presented the following resolution concerning the medical-dental public relations program:

RESOLUTION

WHEREAS, the Hawaii Territorial Dental Association has levied an assessment against each of its members of $40.00 annually for 1948-1949, which assessment totals approximately $10,000.00 annually from 250 members, and

WHEREAS, the purpose of this assessment is to assist the medical profession to conduct a public relations program in the interests of preserving our American free enterprises, not only in the professions but in all businesses as well, and

WHEREAS, $8,640.00 of the first assessment has already been made available and is in our hands for the above specified purposes, and

WHEREAS, the formation of a joint committee of Physicians and Dentists is desirable and necessary jointly to expend these funds but no proper authority exists to form such a committee,

THEREFORE BE IT RESOLVED, that the House of Delegates of the Hawaii Territorial Medical Association authorize the committee on Public Relations of the Hawaii Territorial Medical Association to serve jointly with a similar committee of the Hawaii Territorial Dental Association to be known as the Medico-Dental Public Relations Committee and to function under the terms of the following agreement:

"that all monies collected by the Hawaii Territorial Dental Association by a special assessment of $40.00 against its members shall be paid into a special fund known as the Medico-Dental Public Relations Fund,

"that the unexpended balance of the monies collected from assessments against the members of the Hawaii Territorial Medical Association shall be paid into the above Medico-Dental Public Relations Fund,

"that the administration of the funds and expenditures therefrom shall be jointly agreed upon by the above committees for payment of such activities as rightly come under a program of public relations, without respect to the relationship or ratios of such expenditures to the respective interests of either profession, but strictly on the basis of the principle of preserving and improving the present high standards of medicine and dentistry as a free enterprise.

"that withdrawals from the joint fund shall be made on the signature of the executive secretary after approval by the chairman or vice-chairman of the joint committee.

"that the Central Office or Headquarters office shall be located in the office of the Hawaii Territorial Medical Association.

"that a financial report shall be rendered quarterly to the President of each Association indicating the activities performed, the costs, and the recommendations of the Association as to future assessments and program activities.

"that it is mutually agreed that Mrs. Edith Bennett shall be the executive secretary of this joint committee, effective subject to ratification by the Hawaii Territorial Medical Association, and

"be it further resolved that authorization be given to your Public Relations Committee to enter into comparable relationships with other organizations, should the need arise and should such relationship appear to be in furtherance of the purposes above defined."

ACTION: On motion of Dr. Seymour, seconded by Dr. Johnston, the above resolution was passed unanimously.

Finances:

ACTION: On motion of Dr. Johnston, seconded by Dr. Depp, it was voted that the expenses of the delegate to the A.M.A. convention in Chicago this year, and of the executive secretary, as well as half of the expenses of the alternate delegate should come from the unexpended balance of the public relations fund now in our hands.

The following budget was presented for the year 1948-1949:

BUDGET

Income:		
Dues—358 active members at $15.00	$5,370.00	
Journal		
Advertising	7,000.00	
Subscription & Sales	2,300.00	
Annual Meeting	300.00	
		$14,970.00
Expenses:		
Salaries	4,200.00	
Rent	720.00	
Postage	300.00	
Journal Expense	9,500.00	
Travel	150.00	
Taxes	150.00	
Supplies	400.00	
Library	100.00	
Miscellaneous	250.00	
		$15,770.00

ACTION: The budget was accepted as presented on motion made by Dr. Seymour and seconded by Dr. French.

Election: The Nominating Committee presented the following nominations:

President-elect—Dr. H. E. Crawford
Delegate to A.M.A.—Dr. F. J. Pinkerton
Alternate Delegate—Dr. A. S. Hartwell
Councillors (2 to be elected)—Dr. John Bell, Dr. Rogers Lee Hill and Dr. F. J. Pinkerton

Nominations were closed. Voting was by written ballot. The first ballot resulted in a vote for councillors of Dr. Hill 16, Dr. Pinkerton and Dr. Bell 10 each. Another ballot was voted to decide the tie. The new officers are as follows:

President—Dr. Joseph Palma
President-elect—Dr. H. E. Crawford
Councillors (3 years)—Dr. Rogers Lee Hill, Dr. F. J. Pinkerton
Delegate to A.M.A. (2 years)—Dr. F. J. Pinkerton
Alternate Delegate (2 years)—Dr. A. S. Hartwell

Fee Schedule: Dr. Stewart brought up the subject of the fee schedule and the procedure for its adoption.

ACTION: On motion of Dr. Murray, seconded by Dr. Johnston, the Delegates approved the adoption of the Fee Schedule in principle.

ACTION: On motion of Dr. Chung-Hoon, seconded by Dr. Brennecke, it was agreed that as soon as possible a full copy of the fee schedule would be circulated to each Delegate for review.

ACTION: On motion of Dr. Murray, seconded by Dr. Benson, it was agreed that a special meeting of the House of Delegates should be called between June 15 and June 20.

Laboratory:

ACTION: On motion of Dr. Brennecke, seconded by Dr. Benson, it was voted to ask the Department of Health to set up a laboratory equipped to do Papanicolaou carcinoma stains.

Respectfully submitted,

MRS. EDITH BENNETT
Executive Secretary

MINUTES OF MEETING HOUSE OF DELEGATES AND GENERAL MEMBERSHIP

Saturday, May 8, 1948 at 1:30 p.m.
Mabel Smyth Auditorium

Following the meeting of the House of Delegates at the Pacific Club, the delegates returned to the auditorium of the Mabel Smyth Building where the last scientific session of the meeting was in progress.

The following resolution which had been drawn up by Dr. Joseph Strode was unanimously passed by a standing vote:

RESOLUTION

It would seem fitting and appropriate to pause a few moments in our deliberations to do honor to the memory of one of our recently departed colleagues.

Words cannot express the sincere admiration and esteem that Dr. James R. Judd engendered in all of us who knew him during the many years he was privileged to carry on the healing art in our midst.

It has been the opportunity of few individuals to contribute so much to the welfare of a community as did Dr. James R. Judd to these Hawaiian Islands. Born into an era when the span of his lifetime saw greater developments in surgery than had taken place in all the years preceding, he was particularly fitted by birth, by education and by possessing a combination of those rare qualities, sound surgical judgment and operative skill, to leave an imprint on the medical development of these Islands that will be evident for generations to come.

For thirty years it was my good fortune to come under the influence of Dr. Judd. He was my teacher, my associate, my bosom friend. Never under any circumstances, trying as they frequently are in our profession, did I find him to be other than the soul of honesty and integrity.

He was a man who never jumped to conclusions but one who wanted to weigh carefully all the evidence whether related to some perplexing surgical problem or whether it concerned the reputation of a colleague before passing final judgment. He was ever considerate of the inherent weaknesses, the shortcomings and the frailties of the human race, and approached the problems of life with the heart of a great physician.

That Dr. Judd was aware of the high esteem in which he was held by his colleagues, I am sure, cannot be doubted. He was particularly appreciative of words of commendation for a job well done, and the alacrity with which his professional brothers responded to the suggestion that a testimonial dinner be given in his honor a short while before his death gave him ample proof of the love and respect in which he was held. How much more effective that testimonial was than this feeble attempt to recount his achievements.

In these Islands in all walks of life there was sorrow at the passing of Dr. Judd. He was the friend, the counselor, the "kauka" of the old Hawaiian. He

was the teacher, the guiding spirit, the hero of the interns and budding young surgeons. He was an abiding friend, a genial host, a seeker after the truth, a defender of all that was good for his fellow man. To his patients, whom by his surgical skill he was able to rescue from untimely death or to relieve of their suffering, he possessed divine guidance. To the sick and wounded in Cuba during the Spanish-American War he brought succor; to the maimed and wounded in the trenches in France during the first World War he brought the vigor, the fully blooming knowledge and skill of a consummate surgeon; and to our own Pearl Harbor and the subsequent struggle, he brought the knowledge of modern surgery coupled with the wisdom of experience.

His was a great life, a life consecrated to the relief of the misfortunes of others. He may not now be with us physically, but the spirit of Dr. Judd, the master physician and surgeon, the indulgent, sympathetic father and husband, the friend of us all, the great benefactor of humanity, will be with us forever.

BE IT RESOLVED, therefore, that the foregoing remarks be incorporated in the minutes of the annual meeting of the Hawaii Territorial Medical Association as an expression of the high regard in which Dr. Judd was held by his colleagues and that a copy be sent to the members of his family.

The Chairman announced all of the important actions which had been taken by the Council and House of Delegates during their recent meetings.

There being no further business to come before the meeting, it was adjournd.

Respectfully submitted,
MRS. EDITH BENNETT
Executive Secretary


Mr. MacGregor

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THE HAWAII MEDICAL JOURNAL

P. S.: PAGE 542 LISTS THIS MONTH'S ADVERTISERS.

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

COMMITTEE

VIOLET BUCHANAN, R.N., *Editor,* Leahi Hospital, Honolulu
MARY J. THOMAS, R.N., *Co-Editor,* Honolulu
OLGA LARSON, *Territorial Association Secretary,* Honolulu
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BESS HAMMER, Hawaii, *Secretary*
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The ANA Conference on Economic Secruity for Nurses

NORMA FISHER, R. N.*

First of all, I'd like to express my appreciation to the Territorial Nurses Association for making it possible for me to attend the Conference on Economic Security for Nurses in San Francisco. It was a very interesting meeting and I found it quite stimulating as I know everyone else who attended it did. The Territories of Puerto Rico and Hawaii were represented as was every state but Texas. Most of the states sent one general staff nurse, expenses paid by ANA, and in several instances the chairman of the staff nurses section was sent by the state association. There was considerable comment about the apparent youth of the group, which seems to be somewhat unusual for conventions. Many of the ANA officers were present and the California State Nurses Association acted as our gracious hostess.

After we had been given a general picture of the ANA organization and its aims for the future of nurses, Miss Shirley Titus, executive secretary of the California State Nurses Association, presented a lively account of the CSNA program and the way its organization came about. Several of the officers of CSNA, the legal advisor and a statistician presented details of the organization and practices of the economic security program in California as well as the technical specialized details of labor relationships and wage-hour scales, employment conditions and the related research work.

I will not present here the points of the program as much as the emphasis that was placed upon various aspects most closely related to us as representatives of the staff nurses from all over the country. From the first day to the last, the importance of organization of the staff nurses in the hospitals as a basis for ultimate effective organization of all the staff nurses in the respective sections, was presented again and again with heavy emphasis. It was pointed out that without good organization within the group, we could not hope to succeed in implementing our program regardless of how good it might be or how sincerely we were backed by the ANA.

Dr. Northrup, authority on labor relations at Columbia University, brought out the fact that it need never be felt that the use of collective bargaining and contracts was out of keeping with professional ethics. They are not methods to be confused with strong-arm labor union tactics. Used properly, they represent the ideal way to negotiate understandings between employer and employee and give legal substance to the agreements reached. It was reiterated time and again that the object of the economic security program was to provide for the improvement of nursing service to the public, qualitatively and quantitatively, and that under no circumstances could work stoppage be considered. It must never occur. Improvement of nursing service will be brought about by the improvement of employment conditions for the nurse and the provision of adequate economic security.

Unions and nursing were discussed and it seems that several states have had difficulties, particularly in the large industrial centers. The answer given to questions arising about what to do when the union already has a foothold in the groups, was that the nurses should organize and present a

* General duty staff nurse, St. Francis Hospital, Honolulu, representative of the Territorial Nurses Association at the Conference held April 7-12, 1948.

better plan than the union and present it on a professional basis.

Among other subjects brought up in panel discussions was the coming election of ANA officers and the nurses' responsibility to see that candidates who are going to work for and support this program are elected. A resolution was passed to send a telegram to each state president requesting that a list of nominees and their standing on the subject be prepared and presented to all the districts before election time, so that the voters would be informed and able to vote accordingly.

At the biennial meeting of ANA this year, there is to be reorganization of sections so that staff nurses will have a separate section exclusive of the administrative and supervisory groups. Because in many instances the title of staff nurse brings in any nurse who works in an institution, including supervisors and administrators, a motion was passed to present the new section of the ANA with the task of preparing a definition of staff nursing that excludes administrative duties. A section will also be set up for those in the administrative field so that they will have the opportunity to implement a program of their own.

It is my feeling that the conference was a success. We were made acquainted with the program and shown how to make it work. There is no doubt in my mind that it is a wonderful step forward, but to get the program started and keep it working a great deal of help is needed, specialized and otherwise. To provide such help money is needed. It was explained to us rather effectively that this is the best insurance that can be taken out. I, for one, stand wholeheartedly in favor of raising the Territorial Association dues to provide the finances. I feel that if enough nurses understand the facts of the program and know how closely it affects each one, they will agree that it is desirable and necessary. California has a program that is working and their members pay $28 a year in dues. In return, benefits and salary increases equal to many times that amount are received. By comparison our $12 a year seems very little.

Locally there is the problem of a rapid turnover of nursing personnel. It was suggested to me that the program could best be started by forming a strong committee within each institution with members selected from the interested local nurses who would in turn serve as leaders of the organization. In that way the personnel turnover would leave the basic organization unaffected.

Such a program will need the support and aid of everyone, but it presents gains that are well worth striving for.

NEWS HIGHLIGHTS

MISS DENSFORD REPLIES TO MR. DAVIS*

"We have read the editorial in the February 1948 issue of *Hospitals* entitled "A Lucky Failure." In the past there have been many cases of gratifying cooperation between the American Hospital Association and the American Nurses' Association. Nevertheless, in recent months we have observed a definite pattern of resistance from some hospital administrators to the ANA's economic security program.

"The American Hospital Association is asking the American Nurses' Association and the public to cooperate in a program of recruitment of nurses and student nurses. Yet, your editorial denounced the efforts of nurses to remedy their admittedly unfavorable working conditions through collective bargaining, a technic which has been encouraged throughout our economy by both law and custom. We believe that your position, if adhered to, will inevitably discourage young women from entering nursing and both nurses and the public from cooperating to relieve the present nursing crisis.

"We hope, therefore, that you will cease to obstruct the American Nurses' Association's positive program against the economic evils that beset the nursing profession: the low salaries, the long hours and split shifts, the lack of overtime or on-call pay, inadequate sick leave, the lack of health and retirement programs, and limited observance of vacations and holidays with pay.

"Unless concrete improvements are made, these evils will continue to aggravate the nationwide shortage of nurses. That is previsely why the ANA inaugurated its economic security program. These are its specific objectives:

1. Salaries commensurate with present-day living costs and professional status.
2. Working hours to permit normal social and professional life: an eight hour day and a 40-hour, five-day week, with over-time and on-call pay.
3. Salary differentials for evening, night and special-service duty.
4. Sick leave, paid vacations, paid holidays, health programs, professional leave, et cetera.
5. Removal of restrictions on place of residence.
6. Provision for impartial settlement of individual grievances and disputes.
7. Collectively bargained contracts between state nurses associations and employers of nurses, incorporating points 1 through 6 above.
8. Extension of the Federal Social Security Act.

* Excerpt of a letter from Katharine Densford, President of the ANA, to Graham Davis, President, American Hospital Association, published in AJN, Vol. 48, p. 22.

"At the present time, voluntary hospitals are seeking additional tax exemptions on the premise that immunities already granted to them testify to their public performance. We believe that when the public learns about current employment practices in voluntary hospitals, it may reconsider such privileges and immunities as exemption from the National Labor Relations and Taft-Hartley Acts, the Fair Labor Standards Act, the Federal Social Security Act and the Federal Unemployment Insurance Act. We further believe that the American public will demand:

1. That hospitals shall be operated efficiently and shall not hide inefficiencies by exploiting employees unprotected by labor legislation or by abusing concepts of "service," "charity," "Florence Nightingale spirit," and "economy."
2. That hospitals shall act in accordance with modern principles of employer-employee relations."

Miss Densford's stirring letter can be found complete in the May 1948 issue of AJN, pages 22-23. She has set forth clearly major problems of the nursing profession today, why they must be faced and solved.

ANA REQUESTS COOPERATION IN 1948 NURSING SURVEY

Every tenth nurse registered in the United States and the Territories was selected to participate in the survey. Every nurse who receives a questionnaire is urged to fill it out in full and return it as soon as possible.

The primary purpose of the survey is to determine the present distribution of nurses and will also enable ANA to make an accurate estimate of how many have retired from the profession, how many have changed fields and how many registered, professional nurses are practicing today.

Results of the survey will be published in full in the JOURNAL in the October or November issue.

NURSING SCHOOL STUDY AND STUDENT RECRUITMENT

NATIONAL LEAGUE OF NURSING EDUCATION*

The study of schools of nursing was undertaken as an investigation of the present pattern of administration, organization and financing of schools of nursing. The study has sought to clarify the role of the nurse in the future preparation needed and the adjustment that may be necessary in the administration and financing of her education.

* Excerpts from League Letters for 4-4 and 4-28-48.

Some Facts About Schools of Nursing

State accredited schools now number 1245 and average 85 students. Hospitals control 91%, colleges and universities 6%.

Costs of nursing education are seldom known by those responsible because of inadequate systems of cost accounting.

Drop outs are high; 39% of the class graduating in 1947 withdrew before completion of work.

Service demands are rising rapidly from hospitals, industries, public health agencies; the number of new students and graduates in active service are far from providing the service needed on various levels.

The trend toward fewer and larger schools has been evident for some years.

What Happens Next?

Service to patients must go on without interruption. That does not mean that change must be postponed until the "optimum health for all" has emptied the hospitals. Many changes recommended by the conference are already in effect somewhere or are under way. Every "new idea" has been put into practice demonstrating its value. "What next" is often here and now.

Student Recruitment for 1949

The American Hospital Association will be discontinuing its student nurse recruitment program at the end of this year. Are the professional nursing organizations in your community ready to assume leadership? Has your league a Committee on Careers in Nursing?

What kind of a national student recruitment program shall we have in 1949? This is a question which we must all help to decide in the near future. With the Committee on Careers in Nursing now under the aegis of the League with the six national professional nursing organizations represented on it, this means that all nurses have a voice in and a responsibility for deciding our future program.

HAWAII NURSES ARE NOT UNIONIZED

Island residents delight in reading about themselves and seeing familiar island scenes to illustrate such reading. The April 1948 issue of *Holiday* was especially delightful with its beautiful photography depicting Hawaii at its best. And the accompanying article by Frank J. Taylor was interesting, informative and entertaining. However, one statement he made might lead readers elsewhere to believe that Hawaii's professional nurses have abandoned professional or-

ganizations to join union groups. The statement on page 29 of *Holiday*: "Nurses, clerks, cooks, laundresses and employees of 150 industries pinned on buttons of the International Longshoremen's Union," caused Miss Virginia Jones, President of the Territorial Nurses' Association to write in protest to Mr. Ted Patrick, Editor of *Holiday*.

Miss Jones pointed out that professional nurses favor working through their professional nursing organizations rather than through labor unions for better working conditions and feared that Mr. Taylor's statement would lead professional nurses everywhere to question the condition of nursing in Hawaii. Miss Jones further pointed out that since the Islands are dependent to a large extent upon nurses coming from the mainland, such misrepresentation of nursing conditions here might prevent the well-trained, conscientious nurse from seeking employment in the Territory of Hawaii.

"The truth is that not one instance of a professional graduate nurse joining a labor union in Hawaii has been found," Miss Jones stated.

IMPRESSIONS OF LEAHI HOSPITAL

MARIE LIU, R. N.*

More than four months ago I settled in this new environment, Leahi, and met a new group of people. Of course it has been a different and difficult experience for me. Some of them I can mention, such as language, class work, people and food. Some of them I couldn't even imagine, like patients having so many social activities, education, free beds, rehabilitation and social service. I think this is a historical and big hospital. Sometimes one sees ambulatory patients walking around the hospital grounds for recreation. Leahi seems like a big hospital but without too many doctors and nurses. There are signs to direct a person looking for certain departments.

Tuberculosis patients need prolonged hospitalization. Here, one doctor seems to be able to take care of many more patients than in a general hospital. The hospital has many special departments as the rehabilitation, social service, occupational therapy, to help patients handle their problems. It has been a new experience to learn how to educate patients and their families, and to help them get an understanding of the disease. In China, we are not allowed to talk to patients as freely as at Leahi. A patient here at Leahi is treated not only as a person but also as having a family. During the past four months, I learned one more thing and that is the use of the English language.

China has three kinds of nursing schools; missionary, government and private schools. Only the missionary nursing schools require English. The others teach the whole nursing course in Chinese. I went to a national school and learned a little English there, but mostly I learned the language from my mother and father.

Some nurses' training courses in China are four years long and some are three and a half, and tuberculosis training is included in all training courses. In my home school, which is a general hospital, we have tuberculosis patients in strictly isolated wards.

Patient education is limited to, and supposed to be the responsibility of, public health nurses only. Surgical treatments are rare. Patients do some reading or sewing themselves while in the hospital. The hospital does not offer any other kind of planned entertainment. There are no trained occupational therapists to help patients. Here the patients are lucky because they have free movies, church services, art classes, music appreciation classes and other special programs. Patients are not much different from normal persons except that they are in a hospital. Leahi is a really well organized hospital.

China has a tuberculosis association which has been organized only recently in Shanghai. I am planning to return to China and work with this association to help in the prevention and control of tuberculosis.

ABOUT MISS LIU

Miss Liu is a graduate of the National Central Nursing School, Nanking, China. This is her first trip away from China and she arrived in Honolulu on January 2, 1948. Since then she has been enrolled in the Leahi Hospital course for graduate nurses and has worked on several of the wards. Miss Liu plays the piano and likes to sew. She spends most of her time studying, sightseeing, and learning how the "Hawaiians" live. She is the daughter of Dr. Lan Sing Liu who has been on the Leahi Medical Staff since February 1947.

NURSING EDUCATION

Health education is one of the most important functions of a tuberculosis hospital like Leahi Hospital. One phase of health education is the training of nurses in the various fields of health. To help meet the need for trained health workers in tuberculosis, the Leahi Nursing Education Department was established in September 1945 for the training of students, graduate and prac-

* Post-Graduate student in Tuberculosis Nursing, Leahi Hospital.

tical nurses. In March 1946, students from the St. Francis Hospital and Kuakini General Hospital Schools of Nursing were first enrolled in the student course. This course consists of an intensive two months' program in the care of the tuberculosis patient and in the prevention of this disease. It combines formal classroom instruction, clinical experience, observation in the various departments of the hospital and field trips to other agencies concerned with the tuberculosis control program of the Territory. All of these experiences help the students to recognize the importance of tuberculosis as Hawaii's greatest public health problem and to give them an understanding of how to control this major disease.

To date, eighty students have completed this course. Three of these students have since finished their training at St. Francis Hospital and are now on the staff at Leahi.

An advanced course in tuberculosis nursing for graduate nurses was established in the fall of 1947. Twenty-four graduate nurses have completed this course of two months. These students came from the following places: Mahelona Hospital, Kauai; Public Health Nursing Division of the Health Department; Public Health Nursing Class at the University of Hawaii, and from Honolulu, California, Canada and China.

MAUI DISTRICT NURSES ASSOCIATION

H. EILEEN MAC HENRY, R. N.*

The annual meeting of the Maui District Nurses Association was held at the Maui Country Club on March 18, 1948.

Lolita B. Coughlin, Say Hashizaki Sone, Helen Hood, Faye Berry, Hinayo Ikeda and Yukiko Oshiro of Paia Hospital; Florence Stevenson of Pioneer Hospital, Lahaina; J. Estelle Mahane, Verla June Royce, Mary Lawrence and Mary Estelle of Puunene Hospital, Michiko Hatsui, Masaye Taira and Shigiko Murao of Malulani Hospital, Wailuku, were welcomed into the association. Re-instated were Florella K. Berry of Pioneer Hospital, Emily A. Long of Malulani Hospital and Laura Van de Mark, Public Health Nurse on Molokai. The transfer of Kay T. Wong, private duty nurse from Honolulu was accepted.

Standing Committees appointed for 1948 are: Program: Miss Dorothy Gray, Chairman, Miss Estill, Miss Lawrence, Mrs. Reddig and Mrs. Singlehurst; Membership: Miss Mildred Manty, Chairman, Miss Watanabe, Miss Ringrose, Miss Hood and Miss Morishige; Publicity: Miss Mac Henry, Chairman, Mrs. Kinney, Mrs. Silva and Mrs. Gill; Nominations: re-appointed for 1948, Mrs. Schmidling, Chairman, Laura Wong, Mrs. Martin and Mrs. Chung. Finance: Board of Directors consisting of Miss Sheridan, President; Mrs. L. Wong, Vice President; Mrs. Schmidling, Treasurer; and Miss Manty, Secretary. Mrs. Kay Wong has been appointed temporary corresponding secretary.

Membership at the present time consists of 57 active and 6 associate members. It is hoped that the number will be increased in the near future.

* Reporter for Maui Nurses Association, Makawao, Maui.

Mrs. Ray Gill and family are travelling by freighter through the Panama Canal to New York. They plan to tour the east and motor cross country to the west coast.

NEWS FROM THE BIG ISLAND

MARY E. STANLEY, R. N.*

At the April meeting of the Hawaii Nurses Association it was voted that $200 be given to the Jane Service Memorial Fund. The new Hawaii County Library is now under construction so that in a few months it is hoped that the little corner for the Service Memorial Library will be completed and in use.

On May 9 the Hawaii County Nurses attended a Florence Nightingale Memorial Service at the Episcopal Church in Kealakekua, Kona. The service was lovely and all enjoyed Reverend Linscott's sermon. Thirty members were present. An excellent luncheon was enjoyed at Kona Inn following the services. The pleasure of the group was marred by the absence of Miss Josephine Hall, public health nurse for Kona District, who suffered an acute illness the week before, necessitating hospitalization in Queen's Hospital, Honolulu. She is convalescing satisfactorily.

The many friends of Mrs. Dorothy Moll are much interested in the recent announcement of her marriage to Mr. Earl Bender of Cleveland, Ohio, to be solemnized June 19 at St. Mary's Church in San Francisco. Miss Clara Mitchel is to be maid of honor. Miss Laura Deshazo of Pahala and the groom's sister, Mrs. Lou Holzman, will be in San Francisco for the wedding. The couple will make their home in Cleveland.

Miss Eleanor Syrup of Ookala Plantation left April 5 for a vacation of 3 months in California. Miss Jean Kistler of Laupahoehoe Plantation Hospital is relieving for her during this period and will then leave for her home in Indiana.

Mr. and Mrs. K. Sakai of Kohala are journeying to the mainland to attend the wedding of their daughter Joanne and expect to be away 2 months.

Miss Chitose Araki, Board of Health nurse in Hilo, was married to Mr. William Kanuha on April 5.

Miss Annette Hammersland, nurse at Hilo Sugar Company, has as her house guest, Miss Ruby Peterson of California. They were classmates in training.

Miss Lucy Packard has recently joined the staff of the Board of Health and will be the nurse in the Kau district.

Mr. and Mrs. John Harbottle will return soon to make their home in Hilo. Mrs. Harbottle, nee Betty Stupka, is with the Board of Health. The couple were married at her home in St. Paul, Minnesota.

The engagement of Miss Margaret Chapman of the Board of Health was announced recently. Her fiance, Mr. Douglas Danterman, is a member of the teaching staff of Hilo Intermediate School.

* Staff Nurse, Puumaile Hospital.

NEWS OF HONOLULU C&C ASSOCIATION

Members of the City and County Nurses' Association recently held a successful benefit bridge-party, white elephant and food sale, at the Mabel Smyth Memorial Building, to raise money for the Inter-Island Nurses' Bulletin. The success of this event must be attributed to Mrs. Myrtle Schattenburg, chairman of the committee in charge of the party, and her assistants, Mrs. Ethel H. Brown, Mrs. Illa Storme, and the Arrangements Committee, Miss May Bowron, Chairman, Miss Laura Hooker, Miss Martha Rothwell, Miss Alice Arnold, and Miss Miyoko Okahata, members. This hard working group of nurses aroused a good crowd of ardent card players and an interesting collection of white elephants that helped swell the net profits to $250.00. The party was so much fun that the enthusiastic participants are looking forward to another such gathering in the near future.

Miss Anne Chang, St. Francis Hospital School of Nursing 1943, is now completing requirements for a bachelor of science degree this June at St. Louis University, St. Louis, Missouri.

Miss Mamie Murakami, Queen's Hospital School of Nursing, formerly on the staff at Childrens' Hospital, is enjoying the seasonal changes and sights on the mainland as well as her studies in pediatrics at Cincinnati, Ohio.

Completing another semester of graduate work at Western Reserve University, Cleveland, Ohio, are Miss Joyce Ma, Miss Rose Hee and Miss Betty Oberlies. Miss Ma was formerly supervisor in obsterics at St. Francis Hospital and Miss Hee and Miss Oberlies were public health nurses with the Health Department.

Mrs. Mary J. Thomas, Co-Editor of the Inter-Island Nurses' Bulletin, joined the staff of the Wilcox Memorial Hospital, Kauai, in May 1948. She has agreed to continue with the Bulletin until the end of this year.

St. Francis Hospital reports the following recent members of the Nursing Staff:

Mrs. Mary M. Gomes, St. Francis Hospital School of Nursing, 1944;

Miss Margaret M. Rohan, St. Catherine's Hospital School of Nursing, Omaha, Nebraska;

Miss Frances S. Taguchi, St. Francis Hospital School of Nursing, 1948;

Miss Melba J. Griffin, St. Marks School of Nursing, Utah;

Miss Irene I. Inglehart, Michael Reese Hospital Training School, Illinois;

Miss Emily Matsukawa, St. Francis Hospital School of Nursing, 1948;

Miss Margaret L. Nott, Butterworth Hospital, Michigan;

Miss Thelma Sur, St. Francis Hospital School of Nursing, 1948;

Mrs. Loretta W. Sippy, Sacred Heart School of Nursing, Washington;

Miss Faul Winward, St. Marks School of Nursing, Utah;

Miss Dorothy F. Ikehara, St. Francis Hospital School of Nursing, 1947.

Misses Masunaga and Ikehara returned from the mainland after spending six months doing postgraduate work in the care of premature infants. Miss Ikehara spent three months at Johns Hopkins Hospital and another three months at Jersey City Medical Center. Miss Masunaga spent three months at Johns Hopkins Hospital, six weeks at Michael Reese Hospital and six weeks at St. Francis Hospital, Illinois.

The premature department of St. Francis Hospital now has three nurses who have been scholarship students from the Territory of Hawaii Maternal and Child Health Division.

SCHOOL NURSES TO ORGANIZE SECTION

During the 1947-48 Term nurses in school work have held several social meetings. At the May 3 meeting it was decided to request a section in the district nurses association. Those present were Mrs. Lillian Latus, Mid-Pacific Institute; Mrs. Margaret Wong, McKinley High School; Miss Helen Murawski, Punahou; and Miss Olga Larson, Farrington High School. Mrs. Wong accepted temporary chairmanship and Mrs. Latus will serve as secretary. It was agreed by all present that any nurse who is a member of the district association and interested in school nursing may become a member of this section.

Unable to attend this meeting but interested in the organization of the section are Miss Zoe Iungerich, Kamehameha Boys School; Mrs. Sally Wholly, Kamehameha Girls School; Miss Lucille Otto, Kamehameha Preparatory School; and Mrs. Sylvia Nugent, Territorial School for Deaf and Blind.

Organization of a section for school nurses will promote the enrichment of professional knowledge, discussion and study of problems and enjoyable social contacts. The meetings are to be held regularly one hour before the City & County Association meetings during the school term. Miss Virginia Jones is to serve as advisor.

TENTATIVE PROGRAM FOR ANNUAL MEETING

The annual meeting of the Nurses' Association, Territory of Hawaii, which is scheduled for September 15, 16, and 17 in Honolulu will have a broad program of interest to professional nurses. Besides the business sessions conducted by the Advisory Council and the House of Delegates, there will be speeches on a variety of subjects, commercial displays, two luncheon meetings and a fashion show.

Mrs. Arlene N. Thompson is chairman of the program and arrangements committee which includes Miss Esther Conrow, Miss Dorothy Rish, Miss Toshiko Matsui, and Mrs. Evelyne Thomson.

A tentative program has been lined up as follows:

September 15: Morning—Business meeting and registration.

Luncheon—Don the Beachcomber, Waikiki.

Afternoon—Dr. Rodney R. Beard, medical superintendent of the Pacific-Alaska Division of Pan American Airways will speak on "Air Transport and Epidemic Diseases in the Pacific Basin—the Control of Their Spread."

September 16: Morning—Round table discussion on "Rheumatic Fever."

Luncheon—Kamehameha Club House followed by fashion show.

Afternoon—Advisory Council meeting.

The League of Nursing Education will present a panel discussion on education with Sister Mary Laurine, League program chairman, in charge of arrangements.

September 17: Morning—Meeting of the House of Delegates.

Afternoon—Tour of new Tripler General Hospital.

All sessions except luncheons will be at Mabel Smyth Memorial Building.

MEMBERSHIP REPORT

How does the number of members in the Nurses' Association, Territory of Hawaii, compare with membership in mainland state associations?

Mrs. Dorothy Tong, membership chairman, bases the following report on statistics released by ANA as of December 31, 1947:

Hawaii had in 1947 a membership of a little more than one-half of all nurses registered in the Territory . . . 689 out of 1139.

Seven other states have a comparable ratio; 14 states have a membership of one-third of all nurses registered; all others have less than one-third except Nevada, which tops the states with a membership of two-thirds of all nurses registered.

Mrs. Tong notes that complete figures from twelve states are not listed and that a few states do not require a yearly re-registration.

HAWAII'S RECORD IN THE STATE BOARD TEST POOL EXAMINATIONS

CHARLOTTE KERR, R. N.

Nurses who register in the Territory of Hawaii by examination have been taking the National State Board Test Pool Examinations since September 1946. This means that they write the same examinations as are given to the nurses in 31 states for registration in their respective states.

Each series used here consists of tests covering twelve areas of knowledge, such as chemistry, anatomy and physiology, nursing arts, surgical nursing, communicable diseases, obstetrical nursing, etc.

Comparative reports from the Department of Measurement and Guidance of the National League of Nursing Education have now reached us indicating the rating of Hawaii in relation to other states included in the test series. For the examination that was held in September 1947, Hawaii has the following enviable record:

1. The average percentage rating for Hawaii exceeds the average for all states in every one of the 12 test areas.
2. Hawaii exceeds the highest average for any other state in 6 areas. (Anatomy and physiology, microbiology, pharmacology, medical nursing, obstetrical nursing, surgical nursing.)
3. Hawaii has the second highest average in 2 test areas.
4. In the remaining four examinations, Hawaii placed third in two; sixth in one; and ninth in one (social foundations of nursing).

This report for Hawaii included only 20 examinees from two of the three schools—The Queen's and St. Francis Schools of Nursing—so is not entirely representative of the Islands because of the small number of persons involved. Nevertheless, we can be proud to know that our local schools are doing such fine educational work.

HIGHLIGHTS OF 1948 ANA BIENNIAL CONVENTION

ANNE M. FISHER, R. N.*

The theme of the American Nurses' Association biennial convention held in Chicago from May 31 to June 4 was "America's Nursing Care—A Professional Challenge and a Public Responsibility." *Nursing,* rather than *nurses,* was emphasized throughout the entire convention.

One national nursing organization combining the present six national organizations was voted into existence by the delegates. They also voted to admit lay members to this organization but there was delay in setting up special provisions regarding voting, etc.

The proposed move of ANA headquarters from New York to Chicago was turned down by an overwhelming majority of delegates.

Negro nurses denied membership in a few state nurses' associations may now become members of ANA as individuals by paying the annual $3 ANA membership dues.

Mandatory accreditation of schools of nursing and a larger number of larger and better schools were recommended by Dr. Esther Lucile Brown of the National Nursing Council of New York in order to best serve the interests of the nursing profession and the public alike.

Dr. William C. Menninger, president of the American Psychiatric Association, suggested to the 1500 delegates at the National League of Nursing Education luncheon that:

Professional nurses should expand their "horizons of interest" and increase their social contacts;

A professional nurse should avoid any "tendency to go commercial," but decide whether she is "to make a life or just a living";

* Director of Education, St. Francis Hospital; Lecturer, Nursing Education, University of Hawaii.

Registered nurses must know the patient and not merely the disease.

The 320,000 registered professional nurses in the United States were urged by J. Paul St. Sure, legal counsel to the California State Nurses' Association, to take collective action in their quest for a greater degree of economic security. "If hospital administrators object," said Mr. St. Sure, "it is based on selfish motives and nurses should appeal to the public."

Speaking on "Needs in the Nursing Field Today," Miss Lucile Petrey, Chief, Division of Nursing Service, U. S. Public Health Service, said, "Nurses will be in a better position to fill the need if they base their administrative procedures not on habit but on experimentation and considered choice so that every action is geared to modern needs." She also urged nurses to participate more extensively in the planning and policy making operations of their institutions and communities and to conduct more research and do more writing.

Dr. Leonard W. Mayo, vice president of Western Reserve University and president of the National Conference of Social Work, pointed out that citizen participation is essential to the proper direction, development, and extension of every health and welfare service in every community in the land . . . because these services belong to the people, not to the professions that administer them.

It was a great convention with approximately 8,000 in attendance. Many problems were debatable and were referred to the various committees for further study, especially problems concerning the structure study.

The parliamentarians and two lawyers were kept busy untangling some of the unusual occurrences ("first in the history of the ANA conventions") concerning questions. Every type of parliamentary law was used, it seemed, including appeals. It was a very democratic convention and many people talked. They spoke what was on their minds without reservation.

One of the most exciting events in the delegates' meeting was on the question of young graduates being admitted to the ANA on pro rated dues. It was necessary to have a unanimous vote in order to pass it but one delegate from Texas voted negative. She expressed her convictions but later changed and voted in the affirmative.

I only wish every nurse could have been present. Nursing is a challenge and a real profession and we have a big job to do.

To the Medical Profession:



Our Drug Department keeps under constant refrigeration sufficient sera, antitoxins, toxoids, vaccines and diagnostic agents to safeguard Hawaii against the outbreak of a serious epidemic. Among them are:

- *Gas Gangrene Antitoxin*
- *Undulant Fever Vaccine*
- *Ducrey Vaccine*
- *Kahn Standard Antigen*
- *Lecithin*
- *Salmonella Diagnostic Sera*
- *Shigella Diagnostic Sera*
- *Tuberculin Patch Test Vollmer's*
- *Anti RH Typing Serum*
- *Cholera Vaccine*
- *Typhus Vaccine*
- *Tetanus Antitoxin*
- *Smallpox Vaccine*
- *Pertussis Vaccine*
- *Influenza Virus Vaccine*
- *Immune Serum Globulin*
- *Staphylococcus Toxoid*
- *Diphtheria Antitoxin*
- *Snake Venom Solution*

We also have on hand many other Laboratory Reagents, Antigens, and Biologicals

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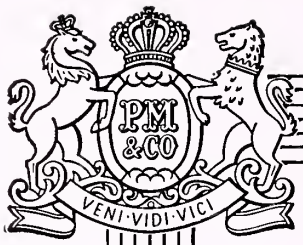
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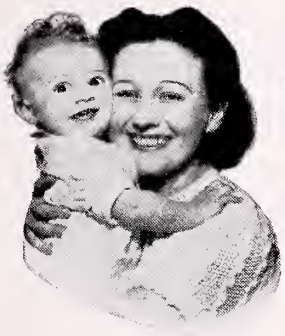
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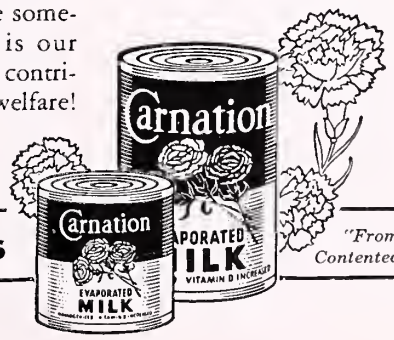
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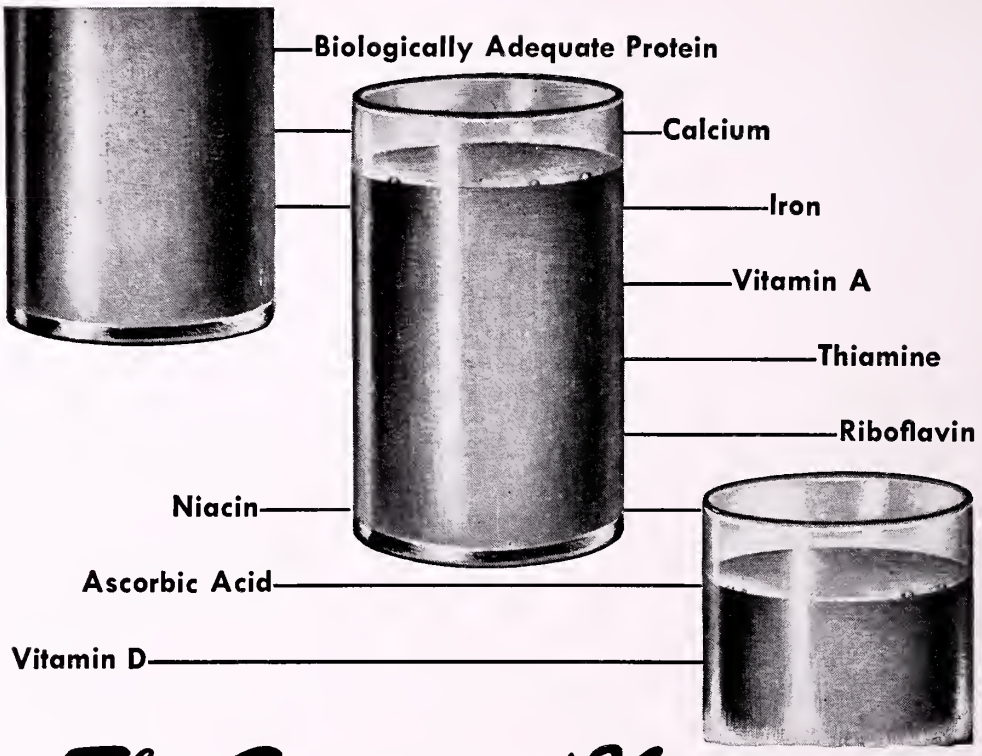


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1. Downing, J. G., Hanson, M. C. and Lamb, M.: Use of 5-Nitro-2-Furaldehyde Semicarbazone in Dermatology, J.A.M.A. *133*:299, 1947 • **2.** Robinson, H. M. and Robinson, H. M., Jr.: The Comparative Values of Some New Drugs in the Pyodermas, South. M. J. *40*:409, 1947 • **3.** Miller, J., Rodriquez, J. and Domonkos, A.: Evaluation of Penicillin in Topical Therapy, New York State J. Med. *47*:2316, 1947 • **4.** McCollough, N. C.: Treatment of Infected War Wounds with a Nitrofuran. Indust. Med. *16*:128, 1947.



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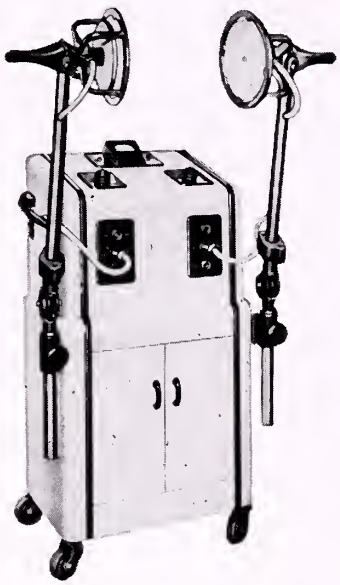
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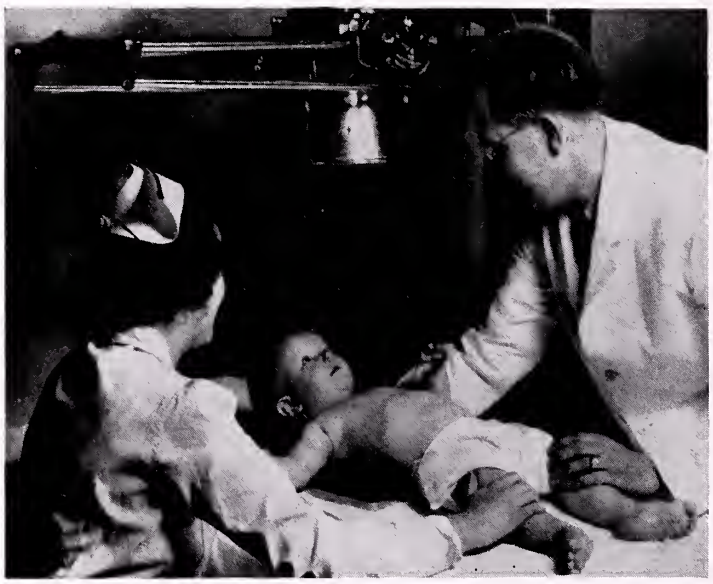
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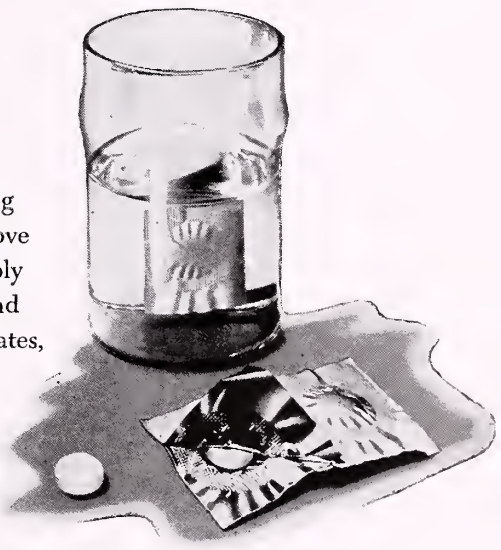
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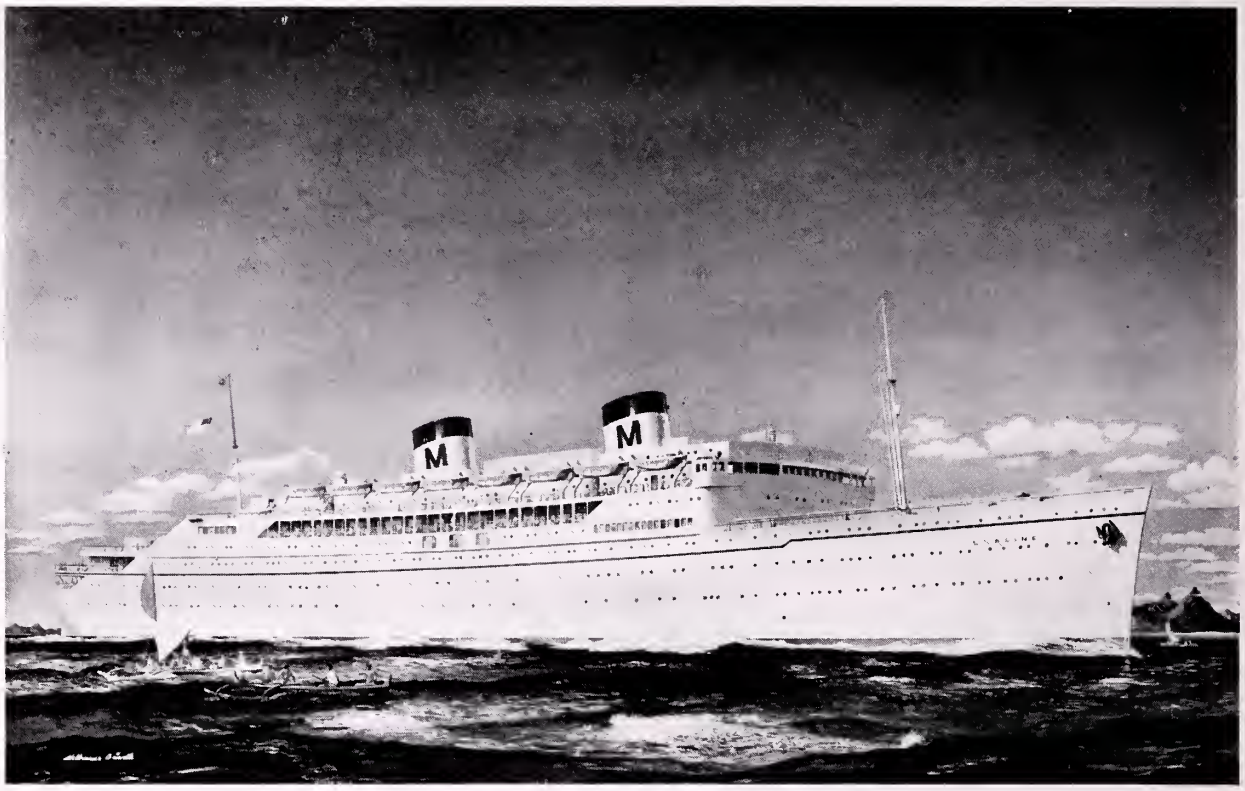
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1. Hoffman, W. S., and Volini, I. F.: Am. J. M. Sc. 213:520 (May) 1947

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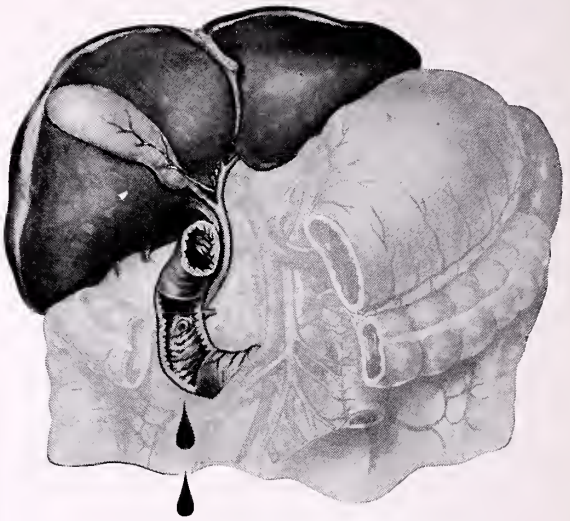
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1,300.00	112.67	76.55	58.50
1,400.00	121.34	82.44	63.00
1,500.00	130.00	88.33	67.50

Just as your dealer lists the price of each car model, Bank of Hawaii "price-tags" its consumer loans. And just as clearly. For there are no hidden charges in this Bank's loans . . . no "fees" or extras. All you pay is 4% a year on the amount you borrow. Convenient monthly payment table helps you budget your payments.



First breath, first bath, first bottle

In a life filled with "firsts", baby has no time to cope with such gastro-intestinal problems as carbohydrate fermentation and attendant distention and diarrhea—particularly during his first few weeks.

'Dexin' has proven an excellent "first carbohydrate" because 1) its high dextrin content is not fermentable by the organisms usually present in the intestinal tract, and 2) because it promotes the formation of soft, flocculent, easily digested curds.

Simply prepared in hot or cold milk, 'Dexin' brand High Dextrin Carbohydrate is easily adapted to increasing formula needs from month to month, and later, being palatable but not too sweet, is a welcome supplement to other bland foods. 'Dexin' *does* make a difference.

'Dexin' HIGH DEXTRIN CARBOHYDRATE
BRAND

Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available carbohydrate 99% • ,115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association.

Literature on request

'Dexin' Reg. Trademark

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 East 41st St., New York 17, N.Y.


This baby's mother learned about Mead's Oleum Percomorphum from her physician, not from public advertising or displays.
"Servamus Fidem"
HOW much sun does the infant really get?
Not very much: (1) When the baby is bundled to protect against weather or (2) when shaded to protect against glare or (3) when the sun does not shine for days at a time. Mead's Oleum Percomorphum is a prophylactic against rickets available 365¼ days in the year, in measurable potency and in controllable dosage. Use the sun, too.
Mead Johnson & Co., Evansville, Ind., U.S.A.

The New York Academy of Medicine

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